

VPDES PERMIT PROGRAM FACT SHEET

This document gives pertinent information concerning the VPDES Permit listed below. This permit is being processed as a MINOR, MUNICIPAL permit. The effluent limitations contained in this permit will maintain the water quality standards of 9 VAC 25-260-00 et seq. The discharge results from the operation of a municipal sewage treatment works. This permit action consists of permit reissuance for a term of five years with updated boilerplate special conditions.

1. PERMIT NO.: VA0022691

EXISTING PERMIT

EXPIRATION DATE: July 31, 2011

2. FACILITY NAME AND LOCAL MAILING ADDRESS

FACILITY PHYSICAL LOCATION (IF DIFFERENT)

South Boston Foursquare Church
1011 South of Dan Road
South Boston, VA 24592

FACILITY CONTACT:

NAME: David Berry

TITLE: Pastor

PHONE: (434) 470-1498

E-MAIL:

ALTERNATE CONTACT:

NAME:

TITLE:

PHONE:

E-MAIL:

3. OWNER CONTACT: (TO RECEIVE PERMIT)

NAME: David Perry

TITLE: Pastor

COMPANY NAME: (IF DIFFERENT)

ADDRESS: 1011 South of Dan Road
South Boston, VA 24592

PHONE: (434) 470-1498

E-MAIL:

4. PERMIT DRAFTED BY: DEQ, Water Permits, Blue Ridge Regional Office

Permit Writer(s): Frank Bowman
Reviewed By: Bob Tate

Date(s): March 10, 2011; April 20, 2011
Date(s): May 19, 2011

5. PERMIT CHARACTERIZATION: (Check as many as appropriate)

() Issuance

(x) Reissuance

() Revoke & Reissue

() Owner Modification

() Board Modification

() Change of Ownership/Name
Effective Date: _____

(x) Municipal

SIC Code(s) 8211
4952

() Industrial

SIC Code(s) _____

(x) POTW

() PVOTW

() Private

() Federal

() State

() Publicly-Owned Industrial

() Site-Specific WQ Criteria

() Variance to WQ Standards

() Water Effects Ratio

() Interim Limits in Other Document (attach to fact sheet)

() Concept Engineering Report Being Approved with Permit

() Possible Interstate Effect

6. APPLICATION COMPLETE DATE: February 1, 2011

6. **APPLICATION COMPLETE DATE:** February 1, 2011

7. **RECEIVING WATERS CLASSIFICATION:** River basin information.

Outfall No(s): 001

Receiving Stream:	UT, Halfway Creek	7-Day/10-Year Low Flow:	0 MGD
River Mile:	0.14	7-Day/10-Year High Flow:	0 MGD
Basin:	Roanoke River	1-Day/10-Year Low Flow:	0 MGD
Subbasin:	Roanoke River	1-Day/10-Year High Flow:	0 MGD
Section:	1	30-Day/5-Year Low Flow:	0 MGD
Class:	III	30-Day/10-Year Low Flow:	0 MGD
Special Standard(s):	PWS	Harmonic Mean Flow:	0 MGD
Tidal?	No	On 303(d) list?	No

8. **FACILITY DESCRIPTION:** Describe the type facility from which the discharges originate.

Existing municipal discharge resulting from the discharge of treated domestic sewage. This facility is no longer being used as a school. The facility has not discharged during this permit cycle.

9. **LICENSED WASTEWATER OPERATOR REQUIREMENTS:** (x) No () Yes Class:

10. **RELIABILITY CLASS:** II

11. **SITE INSPECTION DATE:** 5/13/09

REPORT DATE: 6/24/09

Performed By: Stephanie Bowman

The inspection report is included.

SEE ATTACHMENT 1

12. **DISCHARGE(S) LOCATION DESCRIPTION:** Provide USGS Topo which indicates the discharge location, significant (large) discharger(s) to the receiving stream, water intakes, and other items of interest.

Name of Topo: Cluster Springs

Quadrant No.: 013C

The raw water intake for Town of Clarksville waterworks at John H. Kerr Reservoir is located approximately 24 miles downstream from this discharge, however it is currently inactive.

SEE ATTACHMENT 2

13. **ATTACH A SCHEMATIC OF THE WASTEWATER TREATMENT SYSTEM(S) [IND. & MUN.]. FOR INDUSTRIAL FACILITIES, ALSO PROVIDE A GENERAL DESCRIPTION OF THE PRODUCTION CYCLE(S) AND ACTIVITIES. FOR MUNICIPAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE TREATMENT PROVIDED.**

Narrative: Sewage, design flow equals 0.084 MGD, is treated by an aerobic, unlined lagoon followed by chlorination (calcium hypochlorite), dechlorination (sodium sulfite) and an aeration diffuser.

SEE ATTACHMENT 3

14. **DISCHARGE DESCRIPTION:** Describe each discharge originating from this facility.

SEE ATTACHMENT 4

15. **COMBINED TOTAL FLOW:**

TOTAL: 0.0084 MGD (for public notice)

PROCESS FLOW: MGD (IND.)

NONPROCESS FLOW: MGD (IND.)

DESIGN FLOW: 0.0084 MGD (MUN.)

16. **STATUTORY OR REGULATORY BASIS FOR EFFLUENT LIMITATIONS AND SPECIAL CONDITIONS:** (Check all which are appropriate)

- ☒ State Water Control Law
☒ Clean Water Act
☒ VPDES Permit Regulation (9 VAC 25-31-10 et seq.)
☒ EPA NPDES Regulation (Federal Register)
☐ EPA Effluent Guidelines [40 CFR 400 – 471 (industrial)]
☒ EPA Effluent Guidelines [40 CFR 133 (municipal 2^o treatment)]
☒ Water Quality Standards (9 VAC 25-260-00 et seq.)
☐ Waste load Allocation from a TMDL or River Basin Plan

17. **LIMITATIONS/MONITORING:** Include all effluent limitations and monitoring requirements being placed in the permit for each outfall, including any WET limits. If applicable, include any limitations and monitoring requirements being included for sludge and ground water.

SEE ATTACHMENT 5

18. **SPECIAL CONDITIONS:** Provide all actual permit special conditions, including compliance schedules, toxic monitoring, sludge, ground water, storm water and pretreatment.

SEE ATTACHMENT 6

19. **EFFLUENT/SLUDGE/GROUND WATER LIMITATIONS/MONITORING RATIONALE:** For outfalls, attach any analyses completed (MIX.EXE and WLA.EXE) and STATS printouts for individual toxic parameters. As a minimum, it will include: waste load allocation (acute, chronic and human health); statistics summary (number of data values, quantification level, expected value, variance, covariance, 97th percentile, and statistical method); input data listing; and, effluent limitations determination. Include all calculations used for each outfall's set of effluent limits and incorporate the results of any water quality model(s). Include all calculations/documentation of any antidegradation or anti-backsliding issues in the development of any limitations; complete the review statements below. Provide a rationale for limited internal waste streams and indicator pollutants. Attach any additional information used to develop the limitations, including any applicable water quality standards calculations (acute, chronic and human health).

OTHER CONSIDERATIONS IN LIMITATIONS DEVELOPMENT:

WAIVERS/VARIANCES/ALTERNATE LIMITATIONS: Provide justification or refutation rationale for requested waivers to the permit application (e.g., testing requirements) or variances/alternatives to required permit conditions/limitations. This includes, but is not limited to: variances from technology guidelines or water quality standards; WER/translator study consideration; variances from standard permit limits/conditions.

N/A

SUITABLE DATA: What, if any, effluent data were considered in the establishment of effluent limitations and provide all appropriate information/calculations.

All suitable effluent data were reviewed.

ANTIDEGRADATION REVIEW: Provide all appropriate information/calculations for the antidegradation review.

Tier I: X Tier II: Tier III:

The State Water Control Board's Water Quality Standards include an antidegradation policy (9 VAC 25-260-30). All state surface waters are provided one of three levels of antidegradation protection. For Tier I, existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier II water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier II waters is not allowed without an evaluation of the economic and social impacts. Tier III water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The antidegradation review begins with the Tier determination. The facility discharges to an unnamed tributary to Halfway Creek. This receiving stream is not listed on the 303(d) list and no in-stream data are available that indicate the water quality criteria either have been violated or are barely met. However, the receiving stream critical flows have been determined to be equivalent to 0.0 MGD and the permit contains water quality-based limits for ammonia (full allocation). Tier 1 designation ends where UT enters Halfway Creek. Halfway Creek at the confluence is Tier 2. Therefore, Halfway Creek, at the point of this facility's discharge, is designated as Tier I and no further review is needed. Permit limits have been established by determining waste load allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These waste load allocations will provide for the protection and maintenance of all existing uses.

ANTIBACKSLIDING REVIEW: Indicate if antibacksliding applies to this permit and, if so, provide all appropriate information.

There are no backsliding issues to address in this permit (i.e., limits as stringent or more stringent when compared to the previous permit).

SEE ATTACHMENT 7

20. **SPECIAL CONDITIONS RATIONALE:** Provide a rationale for each of the permit's special conditions, including compliance schedules, toxic monitoring, sludge, ground water, storm water and pretreatment.

SEE ATTACHMENT 8

21. **SLUDGE DISPOSAL PLAN:** Provide a brief description of the sludge disposal plan (e.g., type sludge, treatment provided and disposal method). Indicate if any of the plan elements are included within the permit.

Sludge has not accumulated in the stabilization pond to the point of needing disposal. The grease trap is cleaned on an annual basis (during the month of August) via a septage hauler who hauls to the Leigh Street Sewage Treatment Plant for disposal. There are no applicable limitations and monitoring requirements for sludge.

22. **MATERIAL STORED:** List the type and quantity of wastes, fluids, or pollutants being stored at this facility. Briefly describe the storage facilities and list, if any, measures taken to prevent the stored material from reaching State waters.

None

23. **RECEIVING WATERS INFORMATION:** Refer to the State Water Control Board's Water Quality Standards [e.g., River Basin Section Tables (9 VAC 25-260 - Part IX) [along with Parts VII and VIII]]. Use 9 VAC 25-260-140 C (introduction and numbered paragraph) to address tidal waters where fresh water standards would be applied or transitional waters where the most stringent of fresh or salt water standards would be applied. Attach any memoranda or other information which helped to develop permit conditions (i.e. flow determination memo, tier determinations, PReP complaints, special water quality studies, STORET data and other biological and/or chemical data, etc.

SEE ATTACHMENT 9

24. **303(d) LISTED SEGMENTS:** Indicate if the facility discharges directly to a segment that is listed on the current 303(d) list, if the allocations are specified by an approved TMDL and, if so, provide all appropriate information/calculations. If the facility discharges directly to a stream segment that is on the current 303(d) list, the fact sheet must include a description of how the TMDL requirements are being met.

25. **CHANGES TO PERMIT:** Use TABLE A to record any changes from the previous permit and the rationale for those changes. Use TABLE B to record any changes made to the permit during the permit processing period and the rationale for those changes [i.e., use for comments from the applicant, VDH, EPA, other agencies and/or the public where comments resulted in changes to the permit limitations or any other changes associated with the special conditions or reporting requirements].

SEE ATTACHMENT 11

26. **NPDES INDUSTRIAL PERMIT RATING WORKSHEET:**

TOTAL SCORE: SEE ATTACHMENT _

N/A - This is a municipal facility.

27. **EPA/VIRGINIA DRAFT PERMIT SUBMISSION CHECKLIST:**

SEE ATTACHMENT 12

28. **DEQ PLANNING COMMENTS RECEIVED ON DRAFT PERMIT:** Document any comments received from DEQ planning.

The discharge is not addressed in any planning document as there are no established water quality-based waste load allocations.

29. **PUBLIC PARTICIPATION:** Document comments/responses received during the public participation process. If comments/responses provided, especially if they result in changes to the permit, place in the attachment.

PREVIOUS BOARD ACTION: none

VDH COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the Virginia Dept. of Health and noted how resolved.

Based on their review of the application, the VDH had no objections to the draft permit, as stated by memo dated February 3, 2011. The VDH provided the following comments: "The raw water intake for Town of Clarksville waterworks at John H. Kerr Reservoir is located approximately 24 miles downstream from this discharge, however it is currently inactive. We recommend a minimum Reliability Class II for this facility. This application indicates that the population served is 0 and there is no flow from this 0.0051 mgd facility."

EPA COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the U.S. Environmental Protection Agency and noted how resolved.

EPA waived the right to comment and/or object to the adequacy of the draft permit.

ADJACENT STATE COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from an adjacent state and noted how resolved.

Not Applicable.

OTHER AGENCY COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from any other agencies (e.g., VIMS, VMRC, DGIF, etc.) and noted how resolved.

Not Applicable.

STAFF COMMENTS:

Not Applicable.

OTHER COMMENTS RECEIVED FROM RIPARIAN OWNERS/CITIZENS ON DRAFT PERMIT: Document any comments received from other sources and note how resolved.

- | | |
|------------------------|---|
| Attachment <u>1</u> | Site Inspection Report/Memorandum |
| Attachment <u>2</u> | Discharge Location/Topographic Map |
| Attachment <u>3</u> | Schematic/Plans & Specs/Site Map/Water Balance |
| Attachment <u>4</u> | Discharge/Outfall Description |
| Attachment <u>5</u> | Limitations/Monitoring |
| Attachment <u>6</u> | Special Conditions |
| Attachment <u>7</u> | Effluent/Sludge/Ground Water Limitations/Monitoring Rationale/Suitable Data/
Stream Modeling/Antidegradation/Antibacksliding |
| Attachment <u>8</u> | Special Conditions Rationale |
| Attachment <u> </u> | Material Stored |
| Attachment <u>9</u> | Receiving Waters Info./Tier Determination/STORET Data |
| Attachment <u>10</u> | 303(d) Listed Segments |
| Attachment <u>11</u> | TABLE A and TABLE B - Change Sheets |
| Attachment <u> </u> | NPDES Industrial Permit Rating Worksheet |
| Attachment <u>12</u> | EPA/Virginia Draft Permit Submission Checklist |
| Attachment <u>13</u> | Chronology Sheet |
| Attachment <u> </u> | |

ATTACHMENT 1

SITE INSPECTION REPORT/MEMORANDUM

Virginia Department of Environmental Quality

COMPLIANCE INSPECTION REPORT

FACILITY NAME: Halifax County Schools – South of Dan Elementary		INSPECTION DATE: 05-13-09			
		INSPECTOR: Stephanie Bowman			
PERMIT No.: VA0022691		REPORT DATE: 06-24-09			
TYPE OF FACILITY:	<input checked="" type="checkbox"/> Municipal	<input type="checkbox"/> Major	TIME OF INSPECTION:	Arrival 13:50	Departure 13:55
	<input type="checkbox"/> Industrial	<input checked="" type="checkbox"/> Minor			
	<input type="checkbox"/> Federal	<input type="checkbox"/> Small Minor	TOTAL TIME SPENT (including prep & travel)	4 hours	
<input type="checkbox"/> HP <input type="checkbox"/> LP					
PHOTOGRAPHS: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		UNANNOUNCED INSPECTION? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
REVIEWED BY / Date: Fred T. DiLella					
PRESENT DURING INSPECTION: Operator not on site					

<u>WL/NOV #</u> _____ : <u>Paraphrase Noncompliance issues</u>	<u>Reported Cause of Noncompliance:</u>	<u>Corrective Action Taken:</u>
N/A	N/A	N/A

INSPECTION OVERVIEW AND CONDITION OF TREATMENT UNITS

VPDES NO. VA0022691

UNIT PROCESS: Ponds/Lagoons

1. Type: ☐ Aerated ☒ Unaerated ☐ Polishing
2. No. of cells: 1 In operation: 1
3. Color: ☒ Green ☐ Brown ☐ L. Brown ☐ Grey ☐ Other:
4. Odor: ☐ Septic* ☐ Earthy ☒ None ☐ Other:
5. System operated in: ☐ Series ☐ Parallel ☒ NA
6. If aerated, are lagoon contents mixed adequately? ☐ Yes ☐ No* ☒ NA
7. If aerated, is aeration system operating properly? ☐ Yes ☐ No* ☒ NA
8. Evidence of following problems:
 - a. vegetation in lagoon or dikes ☒ Yes* ☐ No
 *Duck weed
 - b. rodents burrowing on dikes ☐ Yes* ☒ No
 - c. erosion ☐ Yes* ☒ No
 - d. sludge bars ☐ Yes* ☒ No
 - e. excessive foam ☐ Yes* ☒ No
 - f. floating material ☐ Yes* ☒ No
9. Fencing intact: ☒ Yes ☐ No*
10. Grass maintained properly: ☒ Yes ☐ No
11. Level control valves working properly: ☒ Yes ☐ No*
12. Effluent discharge elevation: ☒ Top ☐ Middle ☐ Bottom
13. Freeboard: 3-4 ft.
14. Appearance of effluent: ☐ Good ☐ Fair ☐ Poor ☒ Not discharging
15. General condition: ☒ Good ☐ Fair ☐ Poor
16. Are monitoring wells present? ☒ Yes ☐ No
 - Are wells adequately protected from runoff? ☒ Yes ☐ No* ☐ NA
 - Are caps on and secured? ☒ Yes ☐ No* ☐ NA

Comments: None. School is no longer in use, not discharging.

INSPECTION OVERVIEW AND CONDITION OF TREATMENT UNITS

VPDES NO. VA0022691

UNIT PROCESS: Chlorination

- | | | | |
|---|---|-------------------------------|--|
| 1. No. of chlorinators: 1 | In operation: 0 | | |
| 2. No. of evaporators: 0 | In operation: 0 | | |
| 3. No. of chlorine contact tanks: 1 | In operation: 0 | | |
| 4. Proper flow distribution between units: | <input type="checkbox"/> Yes | <input type="checkbox"/> No* | <input checked="" type="checkbox"/> NA |
| 5. How is chlorine introduced into the wastewater? | | | |
| | <input type="checkbox"/> Perforated diffusers | | |
| | <input type="checkbox"/> Injector with single entry point | | |
| | <input type="checkbox"/> Other Tablet Feeder | | |
| 6. Chlorine residual in basin effluent: <u>N/A</u> mg/L | | | |
| 7. Applied chlorine dosage: <u>N/A</u> lbs/day | | | |
| 8. Contact basins adequately baffled: | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No* | |
| 9. Adequate ventilation: | | | |
| a. cylinder storage area | <input type="checkbox"/> Yes | <input type="checkbox"/> No* | <input checked="" type="checkbox"/> NA |
| b. equipment room | <input type="checkbox"/> Yes | <input type="checkbox"/> No* | <input checked="" type="checkbox"/> NA |
| 10. Proper safety precautions used: | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No* | |
| 11. General condition: | <input checked="" type="checkbox"/> Good | <input type="checkbox"/> Fair | <input type="checkbox"/> Poor |

Comments: Facility was locked and secured at the time of the inspection.

VPDES NO. VA0022691

UNIT PROCESS: Dechlorination

1. Chemical used: ☐ Sulfur Dioxide ☐ Bisulfite ☒ Sodium Sulfite
2. No. of sulfonators: 1 In operation: 0
3. No. of evaporators: 0 In operation: 0
4. No. of chemical feeders: 1 In operation: 0
5. No. of contact tanks: 1 In operation: 0
6. Proper flow distribution between units: ☐ Yes ☐ No* ☒ NA
7. How is chemical introduced into the wastewater?
 - ☐ Perforated diffusers
 - ☐ Injector with single entry point?
 - ☒ Other Tablet Feeder
8. Control system operational: ☒ Yes ☐ No*
 - a. residual analyzers: ☐ Yes ☒ No*
 - b. system adjusted: ☐ Automatic ☒ Manual ☐ Other:
9. Applied dechlorination dose: N/A lbs/day
10. Chlorine residual in basin effluent: NA mg/L
11. Contact basins adequately baffled: ☒ Yes ☐ No* ☐ NA
12. Adequate ventilation:
 - a. cylinder storage area: ☒ Yes ☐ No*
 - b. equipment room: ☐ Yes ☐ No* NA
13. Proper safety precautions used: ☒ Yes ☐ No*
14. General condition: ☒ Good ☐ Fair ☐ Poor

Comments: Facility was locked and secure at the time of the inspection.

EFFLUENT FIELD DATA:

Flow	<u>N/A</u> MGD	Dissolved Oxygen	<u>N/A</u> mg/L	TRC (Contact Tank)	<u>N/A</u> mg/L
pH	<u>N/A</u> S.U.	Temperature	<u>N/A</u> °C	TRC (Final Effluent)	<u>N/A</u> mg/L
Was a Sampling Inspection conducted? <input type="checkbox"/> Yes (see Sampling Inspection Report) <input type="checkbox"/> No					

CONDITION OF OUTFALL AND EFFLUENT CHARACTERISTICS:

1. Type of outfall:	<input checked="" type="checkbox"/> Shore based	<input type="checkbox"/> Submerged	Diffuser?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
2. Are the outfall and supporting structures in good condition?				<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
3. Final Effluent (evidence of following problems):	<input type="checkbox"/> Sludge bar		<input type="checkbox"/> Grease		
	<input type="checkbox"/> Turbid effluent	<input type="checkbox"/> Visible foam	<input type="checkbox"/> Unusual color	<input type="checkbox"/> Oil sheen	
4. Is there a visible effluent plume in the receiving stream?				<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5. Receiving stream:	<input checked="" type="checkbox"/> No observed problems		<input type="checkbox"/> Indication of problems (explain below)		
Comments: <u>Not discharging at the time of the inspection</u>					

REQUIRED CORRECTIVE ACTIONS:

1. No recommendations at this time.

NOTES and COMMENTS:

1. This school is no longer in use and the students have been sent to the new Cluster Springs Elementary School on Route 501 south of this location.
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**DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
LABORATORY INSPECTION REPORT**

10/01

FACILITY NO: VA0022691	INSPECTION DATE: 05/13/09	PREVIOUS INSP. DATE: 10-27-05	PREVIOUS EVALUATION: Deficiencies	TIME SPENT: .25 hour
NAME/ADDRESS OF FACILITY: Halifax Co. Schools-South of Dan Elementary School	FACILITY CLASS: () MAJOR (X) MINOR () SMALL () VPA/NDC	FACILITY TYPE: (X) MUNICIPAL () INDUSTRIAL () FEDERAL () COMMERCIAL LAB	UNANNOUNCED INSPECTION? (X) YES () NO	
			FY-SCHEDULED INSPECTION? (X) YES () NO	
INSPECTOR(S): Stephanie Bowman		REVIEWERS: Fred T. DiLella	PRESENT AT INSPECTION: No operator on site	
LABORATORY EVALUATION			DEFICIENCIES?	
			Yes	No
LABORATORY RECORDS				X
GENERAL SAMPLING & ANALYSIS				X
LABORATORY EQUIPMENT				X
pH ANALYSIS PROCEDURES				X
TOTAL RESIDUAL CHLORINE ANALYSIS PROCEDURES (field)				X
This facility is closed and the students were sent to the new school.				
QUALITY ASSURANCE/QUALITY CONTROL				
Y/N	QUALITY ASSURANCE METHOD	PARAMETERS	FREQUENCY	
N	REPLICATE SAMPLES			
N	SPIKED SAMPLES			
N	STANDARD SAMPLES			
N	SPLIT SAMPLES			
N	SAMPLE BLANKS			
	OTHER			
	EPA-DMR QA DATA?	RATING: () No Deficiency () Deficiency (X) NA		
	QC SAMPLES PROVIDED?	RATING: () No Deficiency () Deficiency (X) NA		
COPIES TO: (X) DEQ - RO; () OWPS; (X) VDH- FO and DWE; (X) OWNER; () EPA-Region III; () Other:				

LABORATORY RECORDS SECTION

LABORATORY RECORDS INCLUDE THE FOLLOWING:

N/A	SAMPLING DATE	N/A	ANALYSIS DATE	N/A	CONT MONITORING CHART
N/A	SAMPLING TIME	N/A	ANALYSIS TIME	N/A	INSTRUMENT CALIBRATION
N/A	SAMPLE LOCATION	N/A	TEST METHOD	N/A	INSTRUMENT MAINTENANCE
				N/A	CERTIFICATE OF ANALYSIS

WRITTEN INSTRUCTIONS INCLUDE THE FOLLOWING:

<input type="checkbox"/>	SAMPLING SCHEDULES	<input type="checkbox"/>	CALCULATIONS	<input type="checkbox"/>	ANALYSIS PROCEDURES
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	YES	NO	N/A
DO ALL ANALYSTS INITIAL THEIR WORK?			X
DO BENCH SHEETS INCLUDE ALL INFORMATION NECESSARY TO DETERMINE RESULTS?			X
IS THE DMR COMPLETE AND CORRECT? MONTH REVIEWED:			X
ARE ALL MONITORING VALUES REQUIRED BY THE PERMIT REPORTED?			X

GENERAL SAMPLING AND ANALYSIS SECTION

	YES	NO	N/A
ARE SAMPLE LOCATION(S) ACCORDING TO PERMIT REQUIREMENTS?			X
ARE SAMPLE COLLECTION PROCEDURES APPROPRIATE?			X
IS SAMPLE EQUIPMENT CONDITION ADEQUATE?			X
IS FLOW MEASUREMENT ACCORDING TO PERMIT REQUIREMENTS?			X
ARE COMPOSITE SAMPLES REPRESENTATIVE OF FLOW?			X
ARE SAMPLE HOLDING TIMES AND PRESERVATION ADEQUATE?			
IF ANALYSIS IS PERFORMED AT ANOTHER LOCATION, ARE SHIPPING PROCEDURES ADEQUATE? LIST PARAMETERS AND NAME & ADDRESS OF LAB:			X
▪ Not discharging			

LABORATORY EQUIPMENT SECTION

	YES	NO	N/A
IS LABORATORY EQUIPMENT IN PROPER OPERATING RANGE?	X		
ARE ANNUAL THERMOMETER CALIBRATION(S) ADEQUATE?	X		
IS THE LABORATORY GRADE WATER SUPPLY ADEQUATE?			X
ARE ANALYTICAL BALANCE(S) ADEQUATE?			X

LABORATORY INSPECTION REPORT SUMMARY

Halifax Co. Schools-South of Dan Elementary	FACILITY NO: VA0022691	INSPECTION DATE: 05/13/09
LABORATORY EVALUATION:	<input type="checkbox"/> Deficiencies <input checked="" type="checkbox"/> No Deficiencies	
LABORATORY RECORDS		
The laboratory records section has no deficiencies.		
GENERAL SAMPLING AND ANALYSIS		
The General Sampling and Analysis section has no deficiencies.		
LABORATORY EQUIPMENT		
The Laboratory Equipment section has no deficiencies.		
INDIVIDUAL PARAMETERS		
<p style="text-align: center;"><u>Total Residual Chlorine (TRC)</u></p> <p>The analysis for the parameter of TRC has no deficiencies.</p> <p style="text-align: center;"><u>pH</u></p> <p>The analysis for the parameter of pH has no deficiencies.</p>		
<u>COMPLIANCE RECOMMENDATIONS</u>		
<p>1. There are no compliance recommendations at this time.</p>		

ANALYST:	Cathy Burns	VPDES NO	VA0022691
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Meter: Sension 1

Parameter: Hydrogen Ion (pH)
1/08

Method: Electrometric

METHOD OF ANALYSIS:

X	18 th Edition of Standard Methods – 4500-H ⁺ B
	21 st or Online Editions of Standard Methods – 4500-H ⁺ B (00)

pH is a method-defined analyte so modifications are not allowed. [40 CFR Part 136.6]		Y	N
1)	Is a certificate of operator competence or initial demonstration of capability available for <u>each analyst/operator</u> performing this analysis? NOTE: Analyze 4 samples of known pH. May use external source of buffer (different lot/manufacturer than buffers used to calibrate meter). Recovery for each of the 4 samples must be +/- 0.1 SU of the known concentration of the sample. [SM 1020 B.1]	X	
2)	Is the electrode in good condition (no chloride precipitate, scratches, deterioration, etc.)? [2.b/c and 5.b]		*
3)	Is electrode storage solution in accordance with manufacturer's instructions? [Mfr.]		*
4)	Is meter calibrated on at least a daily basis using three buffers all of which are at the same temperature? [4.a] NOTE: Follow manufacturer's instructions.		N/A
5)	After calibration, is a buffer analyzed as a check sample to verify that calibration is correct? Agreement should be within +/- 0.1 SU. [4.a]		N/A
6)	Do the buffer solutions appear to be free of contamination or growths? [3.1]		*
7)	Are buffer solutions within the listed shelf-life or have they been prepared within the last 4 weeks? [3.a]		*
8)	Is the cap or sleeve covering the access hole on the reference electrode removed when measuring pH? [Mfr.]		*
9)	For meters with ATC that also have temperature display, is the thermometer verified annually? [SM 2550 B.1]	X	
10)	Is temperature of buffer solutions and samples recorded when determining pH? [4.a]		NA
11)	Is sample analyzed within 15 minutes of collections? [40 CFR Part 136]		NA
12)	Is the electrode rinsed and then blotted dry between reading solutions (Disregard if a portion of the next sample analyzed is used as the rinsing solution.)? [4.a]		*
13)	Is the sample stirred gently at a constant speed during measurement? [4.b]		*
14)	Does the meter hold a steady reading after reaching equilibrium? [4.b]		*
15)	Is a duplicate sample analyzed after every 20 samples if citing 18 th or 19 th Edition or daily for 20 th or 21 st Edition? [Part 1020] NOTE: Not required for <i>in situ</i> samples.		NA
16)	Is the pH of duplicate samples within 0.1SU of the original sample? [Part 1020]		NA
17)	Is there a written procedure for which result will be reported on DMR (Sample or Duplicate) and is this procedure followed? [DEQ]		NA

Problems: Not discharging at this location

ANALYST:	Cathy Burns	VPDES NO.	VA0022691
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Instrument: Pocket Colorimeter II Parameter: Total Residual Chlorine (TRC)
Method: DPD Colorimetric (HACH Pocket Colorimeter)
1/08

METHOD OF ANALYSIS:

HACH Manufacturer's Instructions (Method 8167) plus an edition of *Standard Methods*

X	18 th Edition of <i>Standard Methods</i> 4500-Cl G
	21 st Edition of <i>Standard Methods</i> 4500-Cl G (00)

	Y	N
1) Is a certificate of operator competence or initial demonstration of capability available for <u>each analyst/operator</u> performing this analysis? NOTE: Analyze 4 samples of known TRC. Must use a lot number or source that is different from that used to prepare calibration standards. May not use SpecV™. [SM 1020 B.1]	X	
2) Are the DPD PermaChem™ Powder Pillows stored in a cool, dry place? [Mfr.]		*
3) Are the pillows within the manufacturer's expiration date? [Mfr.]		*
4) Has buffering capability of DPD pillows been checked annually? (Pillows should adjust sample pH to between 6 and 7) [Mfr.]		N/A
5) When pH adjustment is required, is H ₂ SO ₄ or NaOH used? [Hach 11.3.1]		*
6) Are cells clean and in good condition? [Mfr.]		*
7) Is the low range (0.01 mg/L resolution) used for samples containing residuals from 0.2.00 mg/L? [Mfr.]		*
8) Is calibration curve developed (may use manufacturer's calibration) with daily verification using a high and a low standard? NOTE: May use manufacturer's installed calibration and commercially available chlorine standards for daily calibration verifications. [18 th ed 1020 B.5; 21 st ed 4020 B.2.b]		N/A
9) Is the 10-mL cell (2.5-cm diameter) used for samples from 0-2.00 mg/L? [Mfr.]		*
10) Is meter zeroed correctly by using sample as blank for the cell used? [Mfr.]		*
11) Is the instrument cap placed correctly on the meter body when the meter is zeroed and when the sample is analyzed? [Mfr.]		*
12) Is the DPD Total Chlorine PermaChem™ Powder Pillow mixed into the sample? [Hach 11.1]		*
13) Is the analysis made at least three minutes but not more than six minutes after PermaChem™ Powder Pillow addition? [Hach 11.2]		*
14) If read-out is flashing [2.20], is sample diluted correctly, and then reanalyzed? [Hach 1.2 & 2.0]		N/A
15) Are samples analyzed within 15 minutes of collection? [40 CFR Part 136]		N/A
16) Is a duplicate sample analyzed after every 20 samples if citing 18 th Edition [SM 1020 B.6] or daily for 21 st Edition [SM 4020 B.3.c]?		N/A
17) If duplicate sample is analyzed, is the relative percent difference (RPD) ≤ 20? [18 th ed. Table 1020 I; 21 st ed. DEQ]		N/A

Problems: None, not discharging from this location.

ANALYST:	Cathy Burns	VPDES NO	VA0022691
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Meter: _____

Parameter: Dissolved Oxygen
Method: Membrane Electrode
Facility Elevation 450'
1/08

METHOD OF ANALYSIS:

X	18 th Edition of Standard Methods – 4500-O G
	21 st or Online Editions of Standard Methods – 4500-O G (01)

DO is a method-defined analyte so modifications are not allowed. [40 CFR Part 136.6]		Y	N
1)	If samples are collected, is collection carried out with a minimum of turbulence and air bubble formation and is the sample bottle allowed to overflow several times its volume? [1.c]		*
2)	Are meter and electrode operable and providing consistent readings? [3]		*
3)	Is membrane in good condition without trapped air bubbles? [3.b]		*
4)	Is correct filling solution used in electrode? [Mfr.]		*
5)	Are water droplets shaken off the membrane prior to calibration? [Mfr.]		*
6)	Is meter calibrated before use or at least daily? [Mfr. & Part 1020]		*
7)	Is calibration procedure performed according to manufacturer's instructions? [Mfr.]		*
8)	Is sample stirred during analysis? [Mfr.]		*
9)	Is the sample analysis procedure performed according to manufacturer's instructions? [Mfr.]		*
10)	Is meter stabilized before reading D.O.? [Mfr.]		*
11)	Is electrode stored according to manufacturer's instructions? [Mfr.]		*
12)	Is a duplicate sample analyzed after every 20 samples if citing 18 th or 19 th Edition or daily if citing 20 th or 21 st Edition? [Part 1020] NOTE: Not required for <i>in situ</i> samples.		N/A
13)	If a duplicate sample is analyzed, is the reported value for that sampling event the average concentration of the sample and the duplicate? [DEQ]		N/A
14)	If a duplicate sample is analyzed, is the relative percent difference (RPD) \leq 20? [18 th ed. Table 1020 I; 21 st ed. DEQ]		N/A

PROBLEMS: * Operator and equipment not on site at the time of the inspection

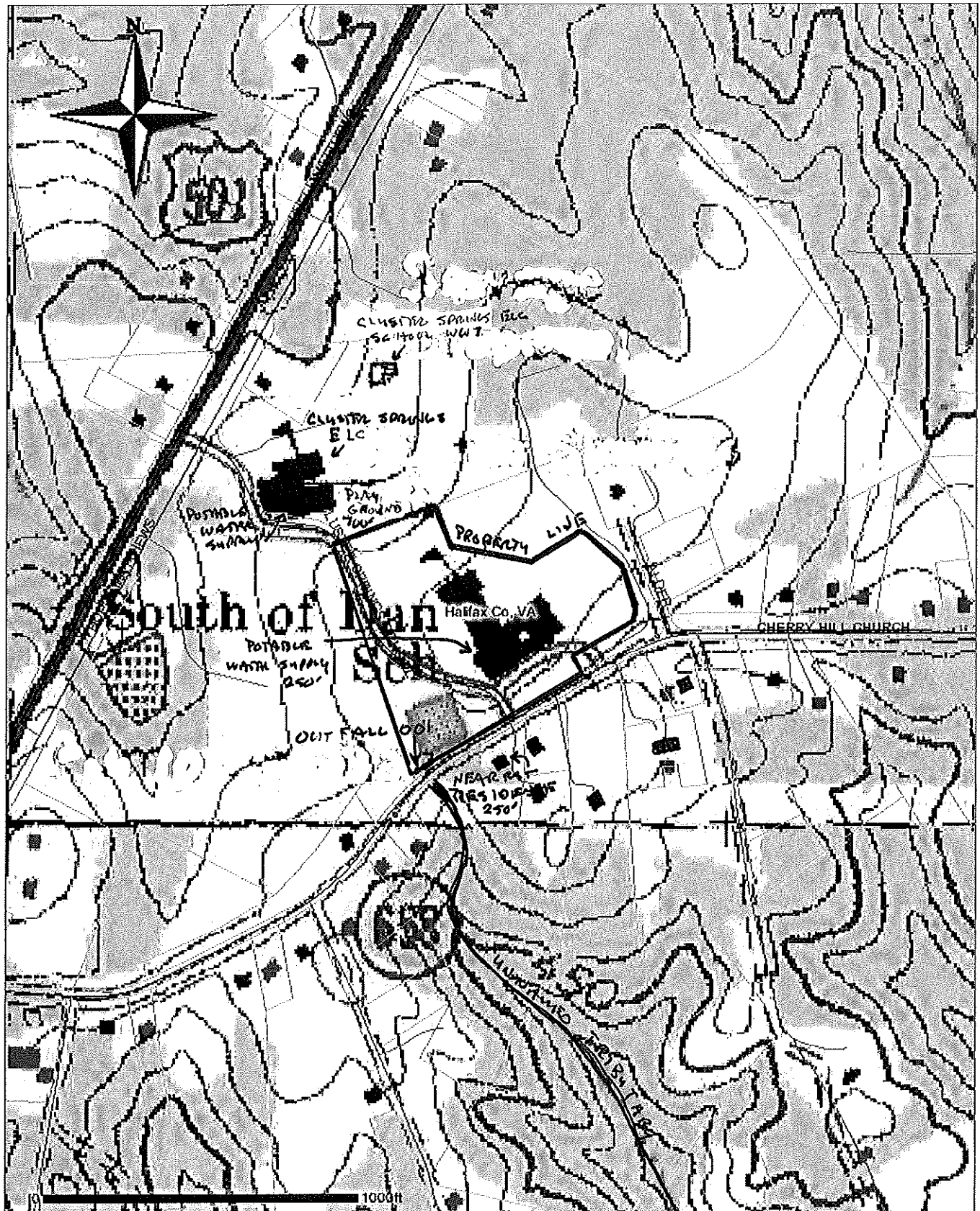
DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
SAMPLE ANALYSIS HOLDING TIME/CONTAINER/PRESERVATION CHECK SHEET
 Revised 3/08 [40 CFR, Part 136.3, Table II]

FACILITY NAME:		Halifax County Schools-South of Dan Elementary				VPDES NO		VA0022691		DATE:		No sample		
PARAMETER		HOLDING TIMES				SAMPLE CONTAINER				PRESERVATION				
		APPROVED	MET?		LOGGED?		ADEQ. VOLUME	APPROP. TYPE		APPROVED	MET?		CHECKED?	
			Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
BOD5 & CBOD5		48 HOURS							ANALYZE 2 HRS or 6°C					
TSS		7 DAYS							6°C					
FECAL COLIFORM / E. coli / Enterococci		6 HRS & 2 HRS TO PROCESS							6°C (1 HOUR)+ 0.008% Na ₂ S ₂ O ₃					
pH		15 MIN.							N/A					
CHLORINE		15 MIN.							N/A					
DISSOLVED O ₂		15 MIN./IN SITU							N/A					
TEMPERATURE		IMMERSION STAB.							N/A					
OIL & GREASE		28 DAYS							6°C + H ₂ SO ₄ /HCL pH<2					
AMMONIA		28 DAYS							6°C + H ₂ SO ₄ pH<2 DECHLOR					
TKN		28 DAYS							6°C + H ₂ SO ₄ pH<2 DECHLOR					
NITRATE		48 HOURS							6°C					
NITRATE+NITRITE		28 DAYS							6°C + H ₂ SO ₄ pH<2					
NITRITE		48 HOURS							6°C					
PHOSPHATE, ORTHO		48 HOURS							FILTER, 6°C					
TOTAL PHOS.		28 DAYS							6°C+ H ₂ SO ₄ pH<2					
METALS (except Hg)		6 MONTHS							HNO ₃ pH<2					
MERCURY (CVAA)		28 DAYS							HNO ₃ pH<2					
PROBLEMS: No discharge									PROBLEMS: No discharge					

ATTACHMENT 2

DISCHARGE LOCATION/TOPOGRAPHIC MAP

Halifax County, VA



MEMORANDUM



DATE: February 3, 2011

TO: Mr. Frank Bowman, Environmental Engineer
DEQ-South Central Regional Office
7705 Timberlake Road
Lynchburg, Virginia 24502

FROM: Mitchell R. Childrey, P.E., Engineering Field Director
VDH-ODW-Danville Field Office

CITY/COUNTY : Halifax County

SUBJECT: ☒ VPDES Application No. VA0022691 ☒ Existing ☐ Proposed
☐ VWP Permit No. _____ ☐ Existing ☐ Proposed
☐ Other: _____

OWNER/APPLICANT: South of Dan Elementary School

LOCATION OF DISCHARGE/ACTIVITY: The discharge is into an unnamed tributary of Halfway Creek in the Roanoke River Basin.

- ☐ There are no public water supply raw water intakes within 15 miles downstream of the discharge.
- ☒ The raw water intake for Town of Clarksville waterworks at John H. Kerr Reservoir is located approximately 24 miles downstream from the discharge, however it is currently inactive. We recommend a minimum Reliability Class II for this facility.
- ☐ The raw water intake for _____ waterworks is located _____ miles downstream from the discharge.
- ☐ Please forward a copy of the Draft Permit for our review and comment.
- ☒ Other Comments: This application indicates that the population served is 0 and there is no flow from this 0.0051 mgd facility.

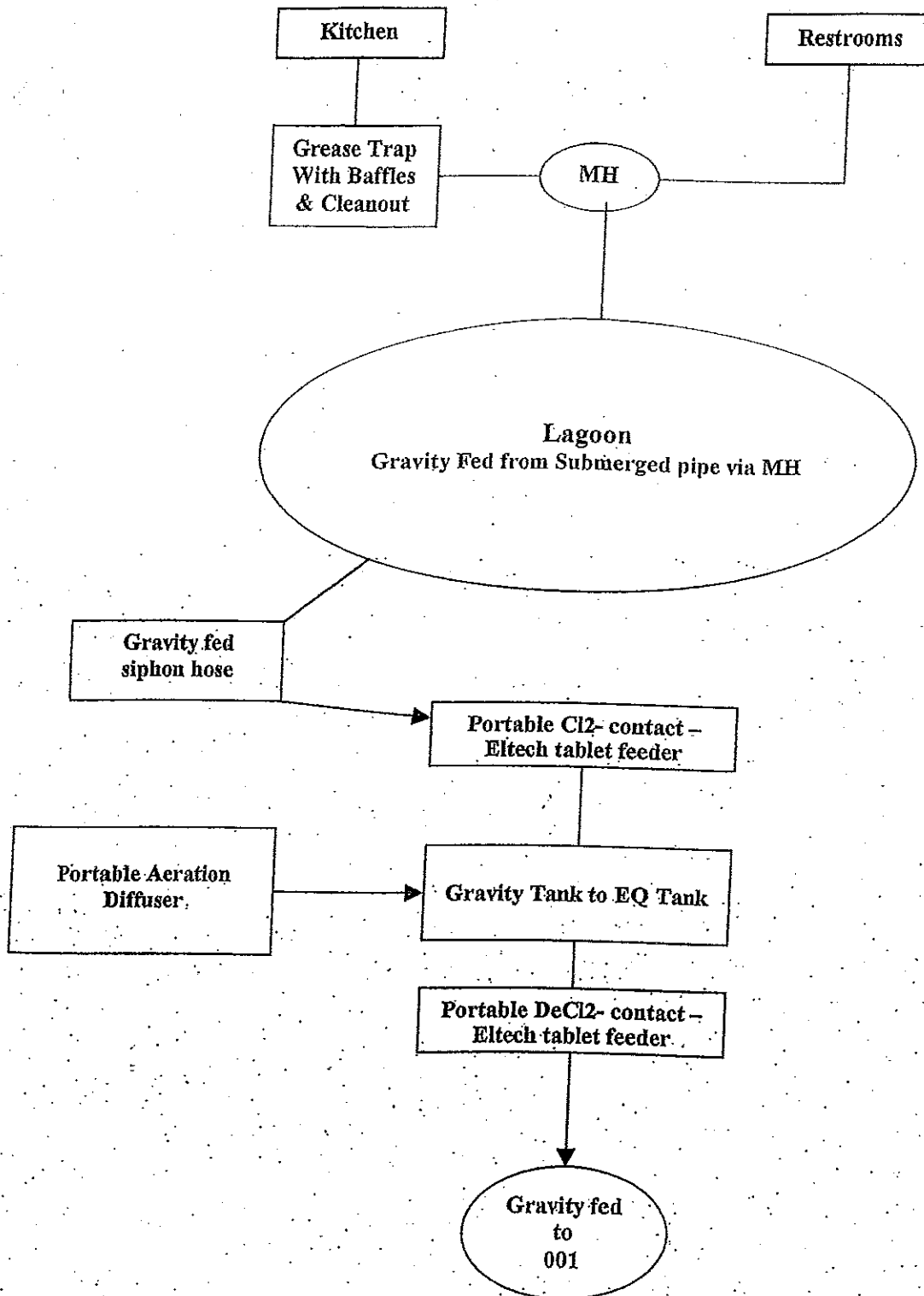
Reviewer: WJT 2/3/11
W. J. Thompson, P.E., District Engineer

WJT:ga

ATTACHMENT 3

SCHEMATIC/PLANS & SPECS/SITE MAP/
WATER BALANCE

SOUTH OF DAN ELEMENTARY SCHOOL
SECTION A ITEM 6 VAO022691



ATTACHMENT 4

DISCHARGE/OUTFALL DESCRIPTION

TABLE I

NUMBER AND DESCRIPTION OF OUTFALLS

OUTFALL NO.	DISCHARGE LOCATION	DISCHARGE SOURCE (1)	TREATMENT (2)	FLOW (3)
001	36° 37' 33" 78° 54' 42"	Sewage from a county-owned building; facility is no longer being used as a school; the facility has not discharged during this permit cycle	Stabilization pond followed by chlorination (disinfection), aeration and dechlorination.	0.0084 MGD

(1) List operations contributing to flow

(2) Give brief description, unit by unit

(3) Give maximum 30-day average flow for industry and design flow for municipal

ATTACHMENT 5

LIMITATIONS/MONITORING

MUNICIPAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 001 DESIGN FLOW: 0.0084 MGD
 Outfall Description: Final discharge after dechlorination
 SIC CODE: 4952 NAICS CODE: 221320

(x) Final Limits () Interim Limits		Effective Dates - From: Permit Effective date				To: Permit expiration date			
EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
		MONTHLY AVERAGE		WEEKLY AVERAGE		MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
		mg/l*	kg/day*	mg/l*	kg/d*	mg/l*	mg/l*		
Flow (MGD) ¹	NL		NA		NA	NL		5 Days/Week	Estimate
BOD ₅	30	1.0	45	1.4	NA	NA		1/Month	Grab
Total Suspended Solids	60	1.9	90	2.9	NA	NA		1/Month	Grab
Ammonia-Nitrogen ³	12	NA	12	NA	NA	NA		1/Month	Grab
Total Residual Chlorine (µg/l) ^{2,3}	9.8	NA	12.4	NA	NA	NA		5 Days/Week	Grab
Dissolved Oxygen	NA			NA	6.4	NA		5 Days/Week	Grab
pH (standard units)	NA		NA	NA	6.0	9.0		5 Days/Week	Grab

* = UNLESS OTHERWISE NOTED NA = NOT APPLICABLE NL = NO LIMIT, MONITORING REQUIREMENT ONLY

¹ See Part I.C.6. for additional flow requirements.

² See Part I.B for additional chlorine monitoring instructions.

³ See Parts I.C.7.a. and I.C.7.b. for quantification levels and reporting requirements, respectively.

The design flow of this treatment facility is 0.0084 MGD.

At least 85 percent removal for BOD₅ and 65 percent removal for TSS must be attained for this effluent.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

BASES FOR LIMITATIONS/MONITORING:

PARAMETER	MULTIPLIER OR PRODUCTION	TECHNOLOGY	WATER QUALITY	BEST PROFESSIONAL JUDGMENT
Flow	Design flow (0.0084 MGD)			X
pH	NA	X	X	
BOD5 (mg/l)	30/45	X		
	1.5 x monthly avg. (weekly avg.)			
BOD5 (kg/day)	Design flow (0.0084 MGD)	X		
TSS (mg/l)	60/90	X		
TSS (kg/day)	Design flow (0.0084 MGD)	X		
Ammonia, chlorine, dissolved oxygen	NA		X	

GROUND WATER LIMITATIONS/MONITORING

GW WELL # MW-1, MW-2 and MW-3

Site Description: Ground water monitoring wells - Monitoring well no. 1 (up-gradient); Monitoring well nos. 2 and 3 (down-gradient)
SIC CODE: 4952 NAICS CODE: 221320

PARAMETER	LIMITATIONS	UNITS	Effective Dates - From: Permit Effective date To: Permit expiration date	
			FREQUENCY	SAMPLE TYPE
Static Water Level	NA	0.01 FT	1/6 Months	Measured
Specific Conductance	NL	µmhos/cm	1/6 Months	Grab
pH	6.0	SU	1/6 Months	Grab
Ammonia - Nitrogen	NL	mg/l	1/6 Months	Grab
Nitrate - Nitrogen	NL	mg/l	1/6 Months	Grab
Total Organic Carbon	NL	mg/l	1/6 Months	Grab
Chloride	NL	mg/l	1/6 Months	Grab
Temperature	NL	° C	1/6 Months	Grab

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/6 Months = In accordance with the following schedule: 1st half (January 1 - June 30, **due July 10**); 2nd half (July 1 - December 31, **due January 10**).

Grab samples - An individual sample should be taken after three (3) well volumes of ground water are removed (allowing the well to recharge between each well volume removed) or until well purging parameters (i.e. pH, temperature, and specific conductance) stabilize to $\pm 10\%$. The bailer or hose used should not contaminate samples.

The bases for the limitations/monitoring are noted in Attachment 7 of this fact sheet.

ATTACHMENT 6

SPECIAL CONDITIONS

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS

B. ADDITIONAL TOTAL RESIDUAL CHLORINE (TRC) LIMITATIONS AND MONITORING REQUIREMENTS

1.
 - a. The permittee shall monitor the TRC at the outlet of the chlorine contact tank, prior to dechlorination, once per day by grab sample.
 - b. No more than 2 of all samples taken at the outlet of the chlorine contact tank, prior to dechlorination, shall be less than 1.5 mg/l for any one calendar month.
 - c. No TRC sample collected after the chlorine contact tank, prior to dechlorination, shall be less than 0.60 mg/l.
2. If an alternative to chlorination as a disinfection method is chosen, *E. coli* shall be limited and monitored by the permittee as specified below:

	<u>Discharge Limitations</u>	<u>Monitoring Requirements</u>	
	<u>Monthly Average</u>	<u>Frequency</u>	<u>Sample Type</u>
<i>E. coli</i> (N/Cml)	126*	1/week	Grab (Between 10 AM & 4 PM)

The above requirements, if applicable, shall substitute for the TRC requirements delineated in Parts I.A. and I.B.1 above.

* Geometric Mean

C. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1. 95% Design Capacity Notification

A written notice and a **plan of action** for ensuring continued compliance with the terms of this permit shall be submitted to the DEQ Regional Office when the monthly average flow influent to the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the DEQ Regional Office **no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity.** The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

2. CTC, CTO Requirement

The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9VAC25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the DEQ Office of Wastewater Engineering (for Water Quality Improvement Funded (WQIF) projects) or submitted by the design engineer and owner to the DEQ regional water permit manager (for non WQIF projects) prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

3. Operation and Maintenance Manual Requirement

The permittee shall review the existing Operations and Maintenance (O & M) Manual and notify the DEQ Regional Office in writing within 90 days of the effective date of this permit whether it is still accurate and complete. If the O & M Manual is no longer accurate and complete, a revised O & M Manual shall be submitted for approval to the DEQ Regional Office within 90 days of the effective date of this permit. The permittee will maintain an accurate, approved operation and maintenance manual for the treatment works. This manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of the permit. The permittee shall operate the treatment works accordance with the approved O&M Manual. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Techniques to be employed in the collection, preservation, and analysis of effluent and sludge samples;
- b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
- c. Discussion of Best Management Practices, if applicable;
- d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants that will prevent these materials from reaching state waters.
- e. Treatment works design, treatment works operation, routine preventative maintenance of units within the treatment system, critical spare parts inventory and record keeping; and,
- f. A plan for the management and/or disposal of waste solids and residues.

Any changes in the practices and procedures followed by the permittee shall be documented and submitted for DEQ Regional staff approval within 90 days of the effective date of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the O & M Manual shall be deemed a violation of the permit.

Letter/Revised Manual Due: No later than October 30, 2011

4. Permit Reopeners

- a. Sludge Reopener

The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

- b. Total Maximum Daily Load (TMDL) Reopener

This permit shall be modified or, alternatively, revoked and reissued if any approved waste load allocation procedure, pursuant to section 303(d) of the Clean Water Act, imposes waste load allocations, limits or conditions on the facility that are not consistent with the requirements of this permit.

5. Licensed Wastewater Operator Requirement

No licensed wastewater works operator is required at this permitted facility.

6. Reliability Class Requirement

The permitted treatment works shall meet Reliability Class II.

7. Compliance Reporting

- a. The quantification levels (QL) shall be less than or equal to the following concentrations:

<u>Effluent Parameter</u>	<u>Quantification Level</u>
BOD5	5.0 mg/l
TSS	1.0 mg/l
Chlorine	0.10 mg/l
Ammonia	0.20 mg/l

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II A of this permit.

- b. **Monthly Average** -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.

Weekly Average -- Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the weekly average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported weekly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the maximum weekly average of the calculated daily quantities.

Daily Maximum -- Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis (QL must be less than or

equal to the QL listed in a. above), then the maximum value of the daily averages shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported daily maximum concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month.

Single Datum - Any single datum required shall be reported as "<QL" if it is less than the QL used for the analysis (QL must be less than or equal to the QL listed in a. above). Otherwise the numerical value shall be reported.

- c. **Significant Digits** -- The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

8. Ground Water Monitoring Plan

The permittee shall conduct a statistical evaluation of the monitoring data to determine if there is evidence of current contamination from the wells. Upgradient and downgradient well shall be evaluated using the statistical techniques given in the Ground Water Monitoring Plan. A statistical evaluation report shall be submitted to the Blue Ridge Regional Office no later than December 10, 2011. This report shall include statistical methods, statistical results, and a discussion of the results.

If monitoring results indicate that any unit has contaminated the ground water, the permittee shall submit a corrective action plan within 60 days of being notified by the regional office. The plan shall set forth the steps to be taken by the permittee to ensure that the contamination source is eliminated, that the contaminant plume is contained on the permittee's property, or any leakage to surface water does not result in a violation of water quality standards. In addition, based on the extent of contamination, a risk analysis may be required. Once approved, this plan and/or analysis shall be incorporated into the permit by reference and become an enforceable part of this permit.

Unless otherwise exempted under an approved corrective action plan, the permittee shall continue sampling and reporting in accordance with the ground water monitoring plan approved on January 13, 1993, with the exception that the monitoring frequency was previously reduced to semiannual, and total phosphorus and fecal coliform were previously deleted from the monitoring requirements. The purpose of this plan is to determine if the system integrity is being maintained and to indicate if activities at the site are resulting in violations of the Board's Ground Water Standards. The approved plan is an enforceable part of the permit. Any changes to the plan must be submitted for approval to the DEQ Regional Office.

Monitoring Schedule:

Semi-annual (1/6 Months) Monitoring = In accordance with the following schedule: 1st half (January 1 - June 30, **due July 10**); 2nd half (July 1 - December 31, **due January 10**).

9. Indirect Dischargers

The permittee shall provide adequate notice to the DEQ Regional Office of the following:

- a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and

- b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

10. Sludge Management Plan

The permittee shall conduct all sewage sludge use or disposal activities in accordance with the Sludge Management Plan (SMP) approved with the issuance of this permit. Any **proposed changes** in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and **submitted for Department of Environmental Quality approval 90 days prior to the effective date of the changes**. Upon approval, the revised SMP becomes an enforceable part of the permit. The permit may be modified or, alternatively, revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use or disposal practices.

11. Closure Plan

If the permittee does not intend to apply for reissuance of this permit or if any part of the facility presently permitted will not be included in a future permit application, an **approvable closure plan** shall be submitted to the DEQ regional office **90 days before the facility is taken out of service**. The closure plan shall include a plan of action and a schedule.

12. Ammonia and Chlorine Limitation

The effluent limitations for ammonia-nitrogen and chlorine are based on the discharge being intermittent in nature. If the facility discharges more than three (3) consecutive days, this permit may be modified or, alternatively, revoked and reissued in order to address chronic water quality standards.

13. Permit Application Requirement

In accordance with Part II. M. of this permit, a new and complete permit application shall be submitted for the reissuance of this permit.

Application Due: No later than February 2, 2016

ATTACHMENT 7

EFFLUENT/GROUND WATER LIMITATIONS/MONITORING RATIONALE

THE EFFLUENT LIMITATIONS AND MONITORING RATIONALE ARE BASED ON THE FOLLOWING:

- FLOW** – The design of the facility is 0.0084 million gallons per day (MGD). The flow is estimated in MGD. The monitoring frequency is 5 days per week. This sample type and monitoring frequency are in accordance with guidance for this size facility and should be appropriate for assessment of treatment plant capacity.
- pH** – The limits of 6.0 SU (minimum) to 9.0 SU (maximum) are both technology-based and set to protect water quality. As this is a discharge to an intermittent stream (zero 7Q10 and 1Q10), this will insure compliance with water quality standards. The monitoring frequency is 5 days per week. The sample type is grab (required for pH). This monitoring frequency and sample type are in accordance with guidance for this size facility and should provide enough data for proper assessment of compliance with the effluent limits.
- BOD5** – The limits of 30 mg/l (monthly average) and 45 mg/l (weekly average) are based on technology [secondary treatment limits as per Federal effluent guidelines (40 CFR 133)], are carried over from the previous permit, and are protective of water quality. The mass limits of 1.0 kg/d (monthly average) and 1.4 kg/d (weekly average) were calculated based on the design flow of 0.0084 MGD. The monitoring frequency is once per month and the sample type is grab (based on design flow). This is in accordance with guidance for this size facility and should provide enough data for proper assessment of compliance with the effluent limits and water quality standards.
- TSS** - The limits of 60 mg/l (monthly average) and 90 mg/l (weekly average) are carried over from the previous permit and set at “equivalent to secondary”. This facility uses a stabilization pond as the primary process and cannot meet secondary limits for TSS [30 mg/l (monthly average) and 45 mg/l (weekly maximum)]. This complies with 40 CFR 133.105 and maintains water quality standards. The mass limits of 1.9 kg/d (monthly average) and 2.9 kg/d (weekly average) were calculated based on the design flow of 0.0084 MGD. The monitoring frequency is once per month and the sample type is grab (based on design flow). This is in accordance with guidance for this size facility and should provide enough data for proper assessment of compliance with the effluent limits.
- TRC** – The total residual chlorine limits of 9.8 and 12.4 µg/l, monthly average and weekly average, respectively, are set to insure compliance with the acute water quality criterion as this is an intermittent discharge into an intermittent stream (zero 7Q10 and 1Q10). The monitoring frequency is 5 days per week. The sample type is grab (required for chlorine). This monitoring frequency and sample type are in accordance with guidance for this size facility and should provide enough data for proper assessment of compliance with the effluent limits. Should the facility discharge more than three consecutive days, the chronic water quality criterion will need to be addressed (see special condition no. C.12).
- DO** - The dissolved oxygen limit of 6.4 mg/l (minimum) is set to protect water quality standards. This level of dissolved oxygen is necessary in order to allow the BOD5 limit of 30 mg/l. The monitoring frequency is 5 days per week. The sample type is grab (required for dissolved oxygen). This monitoring frequency and sample type are in accordance with guidance for this size facility and should provide enough data for proper assessment of compliance with the effluent limit and water quality standards. (Note: There is no record in the files of a water quality model.)
- NH3-N** - The ammonia-nitrogen limit is carried over from the previous permit and is protective of water quality. The monitoring frequency is once per month and the sample type is grab (based on flow). This monitoring frequency and sample type are in accordance with guidance for this size facility and should provide enough data for proper assessment of compliance with the effluent limit. Should the facility discharge more than three consecutive days, the chronic water quality criterion will need to be addressed (see special condition no. C.12).

NOTE: STP monitoring frequencies are in general agreement with Permit Manual MN-2 A.4. The only deviation is flow, pH, and DO monitoring 5 days/week (instead of daily) because of the facility’s operating schedule, but the facility is no longer being used as a school. Since the facility has not discharged during this permit cycle, there are no data available to evaluate: any change in the “equivalent to secondary” limits, or reduced monitoring.

THE GROUND WATER MONITORING RATIONALE IS BASED ON THE FOLLOWING:

The facility utilizes an unlined wastewater stabilization pond as its primary treatment system. On that basis, there is a requirement to perform ground water monitoring to insure continued system integrity. The facility maintains three ground water monitoring wells. Well number one is the up-gradient well and well numbers 2 and 3 are the down-gradient wells. For this reissuance, the monitoring frequency was reduced from quarterly to semiannual as a review of the submitted data showed no significant difference between the up-gradient and down-gradient results. In addition, fecal coliform and total phosphorus were deleted from the monitoring requirements. Their deletion was due to the facts that (1) they are not considered as mobile as ammonia, nitrate and chloride, and (2) ammonia, nitrate and chloride are more common indicators of domestic wastewater. The monitoring frequency of once per six months will remain adequate to assess the ground water monitoring program.

Ground Water

Elevation – This is taken at the time of well sampling and helps to verify ground water flow direction. The monitoring frequency is measured once per six months. This sample type and monitoring frequency are in accordance with guidance.

Specific

Conductance – This is a monitoring requirement with no limits. This test provides an indication of dissolved solids which are mobile in the ground water and is a common indicator of the wastewater. The monitoring frequency is once per six months by grab sample. This monitoring frequency and sample type are in accordance with guidance and should be appropriate for assessment of ground water quality and facility operations.

pH - This is a monitoring requirement with no limits. The monitoring frequency is once per six months by grab sample. This monitoring frequency and sample type are in accordance with guidance and should be appropriate for assessment of ground water quality and facility operations.

Ammonia, Nitrate

Chloride - This is a monitoring requirement with no limits. These parameters are mobile in the ground water and are a common indicator of the wastewater. The monitoring frequency for each parameter is once per six months by grab sample. This monitoring frequency and sample type are in accordance with guidance and should be appropriate for assessment of ground water quality and facility operations.

TOC- This is a monitoring requirement with no limits. This parameter is used, in part, to verify well integrity. The monitoring frequency is once per six months by grab sample. This monitoring frequency and sample type are in accordance with guidance and should be appropriate for assessment of ground water quality and well integrity.

Temperature - This is a monitoring requirement with no limits. It is one of the parameters utilized in well purging for verification of stabilization. The monitoring frequency is once per six months by grab sample. This monitoring frequency and sample type are in accordance with guidance.

FRESHWATER WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Facility Name: South of Dan ES Permit No.: VA0022691 Version: OWP Guidance Memo 00-2011 (8/24/00)

Receiving Stream: UT, Halfway Creek

Stream Information				Stream Flows				Mixing Information				Effluent Information																			
Mean Hardness (as CaCO3) =				34.6 mg/L				1Q10 (Annual) =				0 MGD				Annual - 1Q10 Mix =				100 %				Mean Hardness (as CaCO3) =				50 mg/L			
90% Temperature (Annual) =				26.9 deg C				7Q10 (Annual) =				0 MGD				- 7Q10 Mix =				100 %				90% Temp (Annual) =				26 deg C			
90% Temperature (Wet season) =				deg C				3Q10 (Annual) =				0 MGD				- 3Q10 Mix =				100 %				90% Temp (Wet season) =				deg C			
90% Maximum pH =				7.7 SU				1Q10 (Wet season) =				0 MGD				Wet Season - 1Q10 Mix =				100 %				90% Maximum pH =				7.8 SU			
10% Maximum pH =				6.4 SU				3Q10 (Wet season) =				0 MGD				- 3Q10 Mix =				100 %				10% Maximum pH =				SU			
Tier Designation (1 or 2) =				1				3Q10 =				0 MGD												Discharge Flow =				0.0084 MGD			
Public Water Supply (PWS) Y/N? =				y				Harmonic Mean =				0 MGD																			
Trout Present Y/N? =				n																											
Early Life Stages Present Y/N? =				y																											
Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			Most Limiting Allocations																	
		Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)															
Acenaphthene	0	-	-	6.7E+02	9.9E+02	-	-	6.7E+02	9.9E+02	-	-	-	-	-	-	6.7E+02	9.9E+02														
Acrolein	0	-	-	6.1E+00	9.3E+00	-	-	6.1E+00	9.3E+00	-	-	-	-	-	-	6.1E+00	9.3E+00														
Acrylonitrile ^c	0	-	-	5.1E-01	2.5E+00	-	-	5.1E-01	2.5E+00	-	-	-	-	-	-	5.1E-01	2.5E+00														
Aldrin ^c	0	3.0E+00	-	4.9E-04	5.0E-04	3.0E+00	-	4.9E-04	5.0E-04	-	-	-	-	-	-	3.0E+00	5.0E-04														
Ammonia-N (mg/l) (Yearly)	0	1.21E+01	1.52E+00	-	-	1.2E+01	1.5E+00	-	-	-	-	-	-	-	-	1.2E+01	1.5E+00														
Ammonia-N (mg/l) (High Flow)	0	1.21E+01	3.18E+00	-	-	1.2E+01	3.2E+00	-	-	-	-	-	-	-	-	1.2E+01	3.2E+00														
Anthracene	0	-	-	8.3E+03	4.0E+04	-	-	8.3E+03	4.0E+04	-	-	-	-	-	-	8.3E+03	4.0E+04														
Antimony	0	-	-	5.6E+00	6.4E+02	-	-	5.6E+00	6.4E+02	-	-	-	-	-	-	5.6E+00	6.4E+02														
Arsenic	0	3.4E+02	1.5E+02	1.0E-01	-	3.4E+02	1.5E+02	1.0E-01	-	-	-	-	-	-	-	3.4E+02	1.5E+02														
Barium	0	-	-	2.0E+03	-	-	-	2.0E+03	-	-	-	-	-	-	-	2.0E+03	-														
Benzene ^c	0	-	-	2.2E+01	5.1E+02	-	-	2.2E+01	5.1E+02	-	-	-	-	-	-	2.2E+01	5.1E+02														
Benzidine ^c	0	-	-	8.6E-04	2.0E-03	-	-	8.6E-04	2.0E-03	-	-	-	-	-	-	8.6E-04	2.0E-03														
Benzo (a) anthracene ^c	0	-	-	3.8E-02	1.8E-01	-	-	3.8E-02	1.8E-01	-	-	-	-	-	-	3.8E-02	1.8E-01														
Benzo (b) fluoranthene ^c	0	-	-	3.8E-02	1.8E-01	-	-	3.8E-02	1.8E-01	-	-	-	-	-	-	3.8E-02	1.8E-01														
Benzo (k) fluoranthene ^c	0	-	-	3.8E-02	1.8E-01	-	-	3.8E-02	1.8E-01	-	-	-	-	-	-	3.8E-02	1.8E-01														
Benzo (a) pyrene ^c	0	-	-	3.8E-02	1.8E-01	-	-	3.8E-02	1.8E-01	-	-	-	-	-	-	3.8E-02	1.8E-01														
Bis(2-Chloroethyl) Ether ^c	0	-	-	3.0E-01	5.3E+00	-	-	3.0E-01	5.3E+00	-	-	-	-	-	-	3.0E-01	5.3E+00														
Bis(2-Chloroisopropyl) Ether ^c	0	-	-	1.4E+03	6.5E+04	-	-	1.4E+03	6.5E+04	-	-	-	-	-	-	1.4E+03	6.5E+04														
Bis 2-Ethylhexyl Phthalate ^c	0	-	-	1.2E+01	2.2E+01	-	-	1.2E+01	2.2E+01	-	-	-	-	-	-	1.2E+01	2.2E+01														
Bromofom ^c	0	-	-	4.3E+01	1.4E+03	-	-	4.3E+01	1.4E+03	-	-	-	-	-	-	4.3E+01	1.4E+03														
Butylbenzylphthalate	0	-	-	1.5E+03	1.9E+03	-	-	1.5E+03	1.9E+03	-	-	-	-	-	-	1.5E+03	1.9E+03														
Cadmium	0	1.8E+00	6.6E-01	5.0E+00	-	1.8E+00	6.6E-01	5.0E+00	-	-	-	-	-	-	-	1.8E+00	6.6E-01														
Carbon Tetrachloride ^c	0	-	-	2.3E+00	1.6E+01	-	-	2.3E+00	1.6E+01	-	-	-	-	-	-	2.3E+00	1.6E+01														
Chlordane ^c	0	2.4E+00	4.3E-03	8.0E-03	8.1E-03	2.4E+00	4.3E-03	8.0E-03	8.1E-03	-	-	-	-	-	-	2.4E+00	4.3E-03														
Chloride	0	8.6E+05	2.3E+05	2.5E+05	-	8.6E+05	2.3E+05	2.5E+05	-	-	-	-	-	-	-	8.6E+05	2.3E+05														
TRC	0	1.9E+01	1.1E+01	-	-	1.9E+01	1.1E+01	-	-	-	-	-	-	-	-	1.9E+01	1.1E+01														
Chlorobenzene	0	-	-	1.3E+02	1.6E+03	-	-	1.3E+02	1.6E+03	-	-	-	-	-	-	1.3E+02	1.6E+03														

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			Most Limiting Allocations		
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)
Chlorobromomethane ^c	0	-	-	4.0E+00	1.3E+02	-	-	4.0E+00	1.3E+02	-	-	-	-	-	-	4.0E+00
Chloroform	0	-	-	3.4E+02	1.1E+04	-	-	3.4E+02	1.1E+04	-	-	-	-	-	-	3.4E+02
2-Chloronaphthalene	0	-	-	1.0E+03	1.6E+03	-	-	1.0E+03	1.6E+03	-	-	-	-	-	-	1.0E+03
2-Chlorophenol	0	-	-	8.1E+01	1.5E+02	-	-	8.1E+01	1.5E+02	-	-	-	-	-	-	8.1E+01
Chlorpyrifos	0	8.3E-02	4.1E-02	-	-	8.3E-02	4.1E-02	-	-	-	-	-	-	8.3E-02	4.1E-02	-
Chromium III	0	3.2E-02	4.2E+01	-	-	3.2E-02	4.2E+01	-	-	-	-	-	-	3.2E-02	4.2E+01	-
Chromium VI	0	1.6E-01	1.1E+01	-	-	1.6E-01	1.1E+01	-	-	-	-	-	-	1.6E-01	1.1E+01	-
Chromium, Total	0	-	-	1.0E+02	-	-	-	1.0E+02	-	-	-	-	-	-	-	1.0E+02
Chrysene ^c	0	-	-	3.8E-03	1.8E-02	-	-	3.8E-03	1.8E-02	-	-	-	-	-	-	3.8E-03
Copper	0	7.0E+00	5.0E+00	1.3E+03	-	7.0E+00	5.0E+00	1.3E+03	-	-	-	-	-	7.0E+00	5.0E+00	1.3E+03
Cyanide, Free	0	2.2E+01	5.2E+00	1.4E+02	1.6E+04	2.2E+01	5.2E+00	1.4E+02	1.6E+04	-	-	-	-	2.2E+01	5.2E+00	1.4E+02
DDD ^c	0	-	-	3.1E-03	3.1E-03	-	-	3.1E-03	3.1E-03	-	-	-	-	-	-	3.1E-03
DDE ^c	0	-	-	2.2E-03	2.2E-03	-	-	2.2E-03	2.2E-03	-	-	-	-	-	-	2.2E-03
DDT ^c	0	1.1E+00	1.0E-03	2.2E-03	2.2E-03	1.1E+00	1.0E-03	2.2E-03	2.2E-03	-	-	-	-	1.1E+00	1.0E-03	2.2E-03
Demeton	0	-	1.0E-01	-	-	-	1.0E-01	-	-	-	-	-	-	-	1.0E-01	-
Diazinon	0	1.7E-01	1.7E-01	-	-	1.7E-01	1.7E-01	-	-	-	-	-	-	1.7E-01	1.7E-01	-
Dibenz(a,h)anthracene ^c	0	-	-	3.8E-02	1.8E-01	-	-	3.8E-02	1.8E-01	-	-	-	-	-	-	3.8E-02
1,2-Dichlorobenzene	0	-	-	4.2E+02	1.3E+03	-	-	4.2E+02	1.3E+03	-	-	-	-	-	-	4.2E+02
1,3-Dichlorobenzene	0	-	-	3.2E+02	9.6E+02	-	-	3.2E+02	9.6E+02	-	-	-	-	-	-	3.2E+02
1,4-Dichlorobenzene	0	-	-	6.3E+01	1.9E+02	-	-	6.3E+01	1.9E+02	-	-	-	-	-	-	6.3E+01
3,3-Dichlorobenzidine ^c	0	-	-	2.1E-01	2.8E-01	-	-	2.1E-01	2.8E-01	-	-	-	-	-	-	2.1E-01
Dichlorobromomethane ^c	0	-	-	5.8E+00	1.7E+02	-	-	5.8E+00	1.7E+02	-	-	-	-	-	-	5.8E+00
1,2-Dichloroethane ^c	0	-	-	3.8E+00	3.7E+02	-	-	3.8E+00	3.7E+02	-	-	-	-	-	-	3.8E+00
1,1-Dichloroethylene	0	-	-	3.8E+02	7.1E+03	-	-	3.8E+02	7.1E+03	-	-	-	-	-	-	3.8E+02
1,2-trans-dichloroethylene	0	-	-	1.4E+02	1.0E+04	-	-	1.4E+02	1.0E+04	-	-	-	-	-	-	1.4E+02
2,4-Dichlorophenol	0	-	-	7.7E+01	2.9E+02	-	-	7.7E+01	2.9E+02	-	-	-	-	-	-	7.7E+01
2,4-Dichlorophenoxy acetic acid (2,4-D)	0	-	-	1.0E+02	-	-	-	1.0E+02	-	-	-	-	-	-	-	1.0E+02
1,2-Dichloropropane ^c	0	-	-	5.0E+00	1.5E+02	-	-	5.0E+00	1.5E+02	-	-	-	-	-	-	5.0E+00
1,3-Dichloropropane ^c	0	-	-	3.4E+00	2.1E+02	-	-	3.4E+00	2.1E+02	-	-	-	-	-	-	3.4E+00
Dieldrin ^c	0	2.4E-01	5.6E-02	5.2E-04	5.4E-04	2.4E-01	5.6E-02	5.2E-04	5.4E-04	-	-	-	-	2.4E-01	5.6E-02	5.2E-04
Diethyl Phthalate	0	-	-	1.7E+04	4.4E+04	-	-	1.7E+04	4.4E+04	-	-	-	-	-	-	1.7E+04
2,4-Dimethylphenol	0	-	-	3.8E+02	8.5E+02	-	-	3.8E+02	8.5E+02	-	-	-	-	-	-	3.8E+02
Dimethyl Phthalate	0	-	-	2.7E+05	1.1E+06	-	-	2.7E+05	1.1E+06	-	-	-	-	-	-	2.7E+05
Di-n-Butyl Phthalate	0	-	-	2.0E+03	4.5E+03	-	-	2.0E+03	4.5E+03	-	-	-	-	-	-	2.0E+03
2,4-Dinitrophenol	0	-	-	6.9E+01	5.3E+03	-	-	6.9E+01	5.3E+03	-	-	-	-	-	-	6.9E+01
2-Methyl-4,6-Dinitrophenol	0	-	-	1.3E+01	2.8E+02	-	-	1.3E+01	2.8E+02	-	-	-	-	-	-	1.3E+01
2,4-Dinitrotoluene ^c	0	-	-	1.1E+00	3.4E+01	-	-	1.1E+00	3.4E+01	-	-	-	-	-	-	1.1E+00
Dioxin 2,3,7,8- tetrachlorodibenzo-p-dioxin	0	-	-	5.0E-08	5.1E-08	-	-	5.0E-08	5.1E-08	-	-	-	-	-	-	5.0E-08
1,2-Diphenylhydrazine ^c	0	-	-	3.6E-01	2.0E+00	-	-	3.6E-01	2.0E+00	-	-	-	-	-	-	3.6E-01
Alpha-Endosulfan	0	2.2E-01	5.6E-02	6.2E+01	8.9E+01	2.2E-01	5.6E-02	6.2E+01	8.9E+01	-	-	-	-	2.2E-01	5.6E-02	6.2E+01
Beta-Endosulfan	0	2.2E-01	5.6E-02	6.2E+01	8.9E+01	2.2E-01	5.6E-02	6.2E+01	8.9E+01	-	-	-	-	2.2E-01	5.6E-02	6.2E+01
Alpha + Beta Endosulfan	0	2.2E-01	5.6E-02	-	-	2.2E-01	5.6E-02	-	-	-	-	-	-	2.2E-01	5.6E-02	-
Endosulfan Sulfate	0	-	-	6.2E+01	8.9E+01	-	-	6.2E+01	8.9E+01	-	-	-	-	-	-	6.2E+01
Endrin	0	8.6E-02	3.6E-02	5.9E-02	6.0E-02	8.6E-02	3.6E-02	5.9E-02	6.0E-02	-	-	-	-	8.6E-02	3.6E-02	5.9E-02
Endrin Aldehyde	0	-	-	2.9E-01	3.0E-01	-	-	2.9E-01	3.0E-01	-	-	-	-	-	-	2.9E-01

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Ethylbenzene	0	-	-	5.3E+02	2.1E+03	-	-	5.3E+02	2.1E+03	-	-	-	-	-	-	-	-	-	-	5.3E+02	2.1E+03
Fluoranthene	0	-	-	1.3E+02	1.4E+02	-	-	1.3E+02	1.4E+02	-	-	-	-	-	-	-	-	-	-	1.3E+02	1.4E+02
Fluorene	0	-	-	1.1E+03	5.3E+03	-	-	1.1E+03	5.3E+03	-	-	-	-	-	-	-	-	-	-	1.1E+03	5.3E+03
Foaming Agents	0	-	-	5.0E+02	-	-	-	5.0E+02	-	-	-	-	-	-	-	-	-	-	-	5.0E+02	-
Guthion	0	-	-	1.0E+02	-	-	-	1.0E+02	-	-	-	-	-	-	-	-	-	-	-	1.0E+02	-
Hepachlor ^c	0	5.2E-01	3.8E-03	7.9E-04	7.9E-04	5.2E-01	3.8E-03	7.9E-04	7.9E-04	5.2E-01	3.8E-03	7.9E-04	7.9E-04	5.2E-01	3.8E-03	7.9E-04	7.9E-04	5.2E-01	3.8E-03	7.9E-04	7.9E-04
Heptachlor Epoxide ^c	0	5.2E-01	3.8E-03	3.9E-04	3.9E-04	5.2E-01	3.8E-03	3.9E-04	3.9E-04	5.2E-01	3.8E-03	3.9E-04	3.9E-04	5.2E-01	3.8E-03	3.9E-04	3.9E-04	5.2E-01	3.8E-03	3.9E-04	3.9E-04
Hexachlorobenzene ^c	0	-	-	2.8E-03	2.9E-03	-	-	2.8E-03	2.9E-03	-	-	-	-	-	-	-	-	-	-	2.8E-03	2.9E-03
Hexachlorobutadiene ^c	0	-	-	4.4E+00	1.8E+02	-	-	4.4E+00	1.8E+02	-	-	-	-	-	-	-	-	-	-	4.4E+00	1.8E+02
Hexachlorocyclohexane	0	-	-	2.6E-02	4.9E-02	-	-	2.6E-02	4.9E-02	-	-	-	-	-	-	-	-	-	-	2.6E-02	4.9E-02
Hexachlorocyclohexene	0	-	-	9.1E-02	1.7E-01	-	-	9.1E-02	1.7E-01	-	-	-	-	-	-	-	-	-	-	9.1E-02	1.7E-01
Beta-BHC ^c	0	-	-	9.8E-01	1.8E+00	9.5E-01	-	9.8E-01	1.8E+00	9.5E-01	-	9.8E-01	1.8E+00	9.5E-01	-	9.8E-01	1.8E+00	9.5E-01	-	9.8E-01	1.8E+00
Gamma-BHC ^c (Lindane)	0	-	-	4.0E+01	1.1E+03	-	-	4.0E+01	1.1E+03	-	-	-	-	-	-	-	-	-	-	4.0E+01	1.1E+03
Hexachlorocyclopentadiene	0	-	-	1.4E+01	3.3E+01	-	-	1.4E+01	3.3E+01	-	-	-	-	-	-	-	-	-	-	1.4E+01	3.3E+01
Hexachloroethane ^c	0	-	-	2.0E+00	-	-	-	2.0E+00	-	-	-	-	-	-	-	-	-	-	-	2.0E+00	-
Hydrogen Sulfide	0	-	-	3.8E-02	1.8E-01	-	-	3.8E-02	1.8E-01	-	-	-	-	-	-	-	-	-	-	3.8E-02	1.8E-01
Indeno (1,2,3-cd) pyrene ^c	0	-	-	3.0E+02	-	-	-	3.0E+02	-	-	-	-	-	-	-	-	-	-	-	3.0E+02	-
Iron	0	-	-	3.5E+02	9.6E+03	-	-	3.5E+02	9.6E+03	-	-	-	-	-	-	-	-	-	-	3.5E+02	9.6E+03
Isophorone ^c	0	-	-	0.0E+00	-	-	-	0.0E+00	-	-	-	-	-	-	-	-	-	-	-	0.0E+00	-
Kepon ^c	0	4.9E+01	5.6E+00	1.5E+01	-	4.9E+01	5.6E+00	1.5E+01	-	4.9E+01	5.6E+00	1.5E+01	-	4.9E+01	5.6E+00	1.5E+01	-	4.9E+01	5.6E+00	1.5E+01	-
Lead	0	-	-	1.0E-01	-	-	-	1.0E-01	-	-	-	-	-	-	-	-	-	-	-	1.0E-01	-
Malathion	0	-	-	5.0E+01	-	-	-	5.0E+01	-	-	-	-	-	-	-	-	-	-	-	5.0E+01	-
Manganese	0	-	-	7.7E-01	-	1.4E+00	7.7E-01	-	-	1.4E+00	7.7E-01	-	-	1.4E+00	7.7E-01	-	-	1.4E+00	7.7E-01	-	-
Mercury	0	-	-	4.7E+01	1.5E+03	-	-	4.7E+01	1.5E+03	-	-	-	-	-	-	-	-	-	-	4.7E+01	1.5E+03
Methyl Bromide	0	-	-	4.8E+01	5.9E+03	-	-	4.8E+01	5.9E+03	-	-	-	-	-	-	-	-	-	-	4.8E+01	5.9E+03
Methylene Chloride ^c	0	-	-	1.0E+02	-	-	-	1.0E+02	-	-	-	-	-	-	-	-	-	-	-	1.0E+02	-
Methoxychlor	0	-	-	0.0E+00	-	-	-	0.0E+00	-	-	-	-	-	-	-	-	-	-	-	0.0E+00	-
Mirex	0	1.0E+02	1.1E+01	6.1E+02	4.6E+03	1.0E+02	1.1E+01	6.1E+02	4.6E+03	1.0E+02	1.1E+01	6.1E+02	4.6E+03	1.0E+02	1.1E+01	6.1E+02	4.6E+03	1.0E+02	1.1E+01	6.1E+02	4.6E+03
Nickel	0	-	-	1.0E+04	-	-	-	1.0E+04	-	-	-	-	-	-	-	-	-	-	-	1.0E+04	-
Nitrate (as N)	0	-	-	1.7E+01	6.9E+02	-	-	1.7E+01	6.9E+02	-	-	-	-	-	-	-	-	-	-	1.7E+01	6.9E+02
Nitrobenzene	0	-	-	6.9E-03	3.0E+01	-	-	6.9E-03	3.0E+01	-	-	-	-	-	-	-	-	-	-	6.9E-03	3.0E+01
N-Nitrosodimethylamine ^c	0	-	-	3.3E+01	6.0E+01	-	-	3.3E+01	6.0E+01	-	-	-	-	-	-	-	-	-	-	3.3E+01	6.0E+01
N-Nitrosodiphenylamine ^c	0	-	-	5.0E-02	5.1E+00	-	-	5.0E-02	5.1E+00	-	-	-	-	-	-	-	-	-	-	5.0E-02	5.1E+00
N-Nitrosodi-n-propylamine ^c	0	-	-	6.6E+00	-	2.8E+01	6.6E+00	-	-	2.8E+01	6.6E+00	-	-	2.8E+01	6.6E+00	-	-	2.8E+01	6.6E+00	-	-
Nonylphenol	0	6.5E-02	1.3E-02	-	-	6.5E-02	1.3E-02	-	-	6.5E-02	1.3E-02	-	-	6.5E-02	1.3E-02	-	-	6.5E-02	1.3E-02	-	-
Parathion	0	-	-	6.4E-04	6.4E-04	-	-	6.4E-04	6.4E-04	-	-	-	-	-	-	-	-	-	-	6.4E-04	6.4E-04
PCB Total ^c	0	-	-	2.7E+00	3.0E+01	7.7E-03	5.9E-03	2.7E+00	3.0E+01	7.7E-03	5.9E-03	2.7E+00	3.0E+01	7.7E-03	5.9E-03	2.7E+00	3.0E+01	7.7E-03	5.9E-03	2.7E+00	3.0E+01
Pentachlorophenol ^c	0	-	-	1.0E+04	8.6E+05	-	-	1.0E+04	8.6E+05	-	-	-	-	-	-	-	-	-	-	1.0E+04	8.6E+05
Phenol	0	-	-	8.3E+02	4.0E+03	-	-	8.3E+02	4.0E+03	-	-	-	-	-	-	-	-	-	-	8.3E+02	4.0E+03
Pyrene	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Radionuclides	0	-	-	1.5E+01	-	-	-	1.5E+01	-	-	-	-	-	-	-	-	-	-	-	1.5E+01	-
Gross Alpha Activity (pCi/L)	0	-	-	4.0E+00	4.0E+00	-	-	4.0E+00	4.0E+00	-	-	-	-	-	-	-	-	-	-	4.0E+00	4.0E+00
Beta and Photon Activity (mrem/yr)	0	-	-	5.0E+00	-	-	-	5.0E+00	-	-	-	-	-	-	-	-	-	-	-	5.0E+00	-
Radium 226 + 228 (pCi/L)	0	-	-	3.0E+01	-	-	-	3.0E+01	-	-	-	-	-	-	-	-	-	-	-	3.0E+01	-
Uranium (ug/l)	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Selenium, Total Recoverable	0	2.0E+01	5.0E+00	1.7E+02	4.2E+03	2.0E+01	5.0E+00	1.7E+02	4.2E+03	-	-	-	-	-	-	-	-	2.0E+01	5.0E+00	1.7E+02	4.2E+03
Silver	0	1.0E+00	-	-	-	1.0E+00	-	-	-	-	-	-	-	-	-	-	-	1.0E+00	-	-	-
Sulfate	0	-	-	2.5E+05	-	-	-	2.5E+05	-	-	-	-	-	-	-	-	-	-	-	2.5E+05	-
1,1,2,2-Tetrachloroethane ^c	0	-	-	1.7E+00	4.0E+01	-	-	1.7E+00	4.0E+01	-	-	-	-	-	-	-	-	-	-	1.7E+00	4.0E+01
Tetrachloroethylene ^c	0	-	-	6.9E+00	3.3E+01	-	-	6.9E+00	3.3E+01	-	-	-	-	-	-	-	-	-	-	6.9E+00	3.3E+01
Thallium	0	-	-	2.4E-01	4.7E-01	-	-	2.4E-01	4.7E-01	-	-	-	-	-	-	-	-	-	-	2.4E-01	4.7E-01
Toluene	0	-	-	5.1E+02	6.0E+03	-	-	5.1E+02	6.0E+03	-	-	-	-	-	-	-	-	-	-	5.1E+02	6.0E+03
Total dissolved solids	0	-	-	5.0E+05	-	-	-	5.0E+05	-	-	-	-	-	-	-	-	-	-	-	5.0E+05	-
Toxaphene ^c	0	7.3E-01	2.0E-04	2.8E-03	2.8E-03	7.3E-01	2.0E-04	2.8E-03	2.8E-03	-	-	-	-	-	-	-	-	7.3E-01	2.0E-04	2.8E-03	2.8E-03
Tributyltin	0	4.6E-01	7.2E-02	-	-	4.6E-01	7.2E-02	-	-	-	-	-	-	-	-	-	-	4.6E-01	7.2E-02	-	-
1,2,4-Trichlorobenzene	0	-	-	3.5E+01	7.0E+01	-	-	3.5E+01	7.0E+01	-	-	-	-	-	-	-	-	-	-	3.5E+01	7.0E+01
1,1,2-Trichloroethane ^c	0	-	-	5.9E+00	1.6E+02	-	-	5.9E+00	1.6E+02	-	-	-	-	-	-	-	-	-	-	5.9E+00	1.6E+02
Trichloroethylene ^c	0	-	-	2.9E+01	3.0E+02	-	-	2.9E+01	3.0E+02	-	-	-	-	-	-	-	-	-	-	2.9E+01	3.0E+02
2,4,6-Trichlorophenol ^c	0	-	-	1.4E+01	2.4E+01	-	-	1.4E+01	2.4E+01	-	-	-	-	-	-	-	-	-	-	1.4E+01	2.4E+01
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	0	-	-	5.0E+01	-	-	-	5.0E+01	-	-	-	-	-	-	-	-	-	-	-	5.0E+01	-
Vinyl Chloride ^c	0	-	-	2.9E-01	2.4E-01	-	-	2.9E-01	2.4E-01	-	-	-	-	-	-	-	-	-	-	2.9E-01	2.4E-01
Zinc	0	6.5E+01	6.6E+01	7.4E+03	2.6E+04	6.5E+01	6.6E+01	7.4E+03	2.6E+04	-	-	-	-	-	-	-	-	6.5E+01	6.6E+01	7.4E+03	2.6E+04

Notes:

- All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
- Discharge flow is highest monthly average or Form 2C maximum for Industries and design flow for Municipals
- Metals measured as Dissolved, unless specified otherwise
- "C" indicates a carcinogenic parameter
- Regular WLAs are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information.
Antidegradation WLAs are based upon a complete mix.
Antideg. Baseline = (0.25(WQC - background conc.) + background conc.) for acute and chronic
= (0.1(WQC - background conc.) + background conc.) for human health
- WLAs established at the following stream flows: 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens and Harmonic Mean for Carcinogens. To apply mixing ratios from a model set the stream flow equal to (mixing ratio - 1), effluent flow equal to 1 and 100% mix.

Note: do not use QL's lower than the minimum QL's provided in agency guidance

Metal	Target Value (SSTV)
Antimony	5.6E+00
Arsenic	1.0E+01
Barium	2.0E+03
Cadmium	3.9E-01
Chromium III	2.5E+01
Chromium VI	6.4E+00
Copper	2.8E+00
Iron	3.0E+02
Lead	3.4E+00
Manganese	5.0E+01
Mercury	4.6E-01
Nickel	6.8E+00
Selenium	3.0E+00
Silver	4.2E-01
Zinc	2.6E+01

22691 NH3 STATS

4/14/2011 3:59:36 PM

Facility = South of Dan ES
Chemical = ammonia
Chronic averaging period = 30
WLAA = 12
WLAC =
Q.L. = 0.2
samples/mo. = 1
samples/wk. = 1

Summary of Statistics:

observations = 1
Expected Value = 9
Variance = 29.16
C.V. = 0.6
97th percentile daily values = 21.9007
97th percentile 4 day average = 14.9741
97th percentile 30 day average = 10.8544
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Acute Toxicity
Maximum Daily Limit = 12
Average Weekly limit = 12
Average Monthly Limit = 12

The data are:

9

22691 TRC STATS

4/14/2011 4:03:17 PM

Facility = South of Dan ES
Chemical = chlorine
Chronic averaging period = 4
WLAA = 19
WLAC =
Q.L. = 100
samples/mo. = 20
samples/wk. = 5

Summary of Statistics:

observations = 1
Expected Value = 1500
Variance = 810000
C.V. = 0.6
97th percentile daily values = 3650.12
97th percentile 4 day average = 2495.68
97th percentile 30 day average = 1809.07
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Acute Toxicity
Maximum Daily Limit = 19
Average Weekly limit = 12.3834080752271
Average Monthly Limit = 9.77838359349855

The data are:

1500

South of Dan ES, #VA0022691

Date	pH		DO min mg/l	TSS avg. mth mg/l
	min	max		
Sep-10				6
Aug-10				
Jul-10				
Jun-10				16
May-10				37
Apr-10				11
Mar-10				8
Feb-10				8
Jan-10				7
Dec-09				5
Nov-09				3
Oct-09				11
Sep-09				5
Aug-09				14
Jul-09				15
Jun-09				18
May-09				18
Apr-09				25
Mar-09				14
Feb-09				7
Jan-09				16
Dec-08				2
Nov-10				3
Oct-08				9
Sep-08				15
Aug-08				6
Jul-08				11
Jun-08				15
May-08				60
Apr-08				25
Mar-08				7
Feb-08				4
Jan-08				3
Dec-07				5
Nov-07				2
Oct-07				5
Sep-07				7
Aug-07				16
Jul-07				
Jun-07				
May-07				
Apr-07				
Mar-07				
Feb-07				
Jan-07				
Dec-06				

Nov-06
 Oct-06
 Sep-06
 Aug-06
 Jul-06
 Jun-06
 May-06
 Apr-06
 Mar-06

90th percentile:	#NUM!	90th percentile:	21.5
10th percentile:	#NUM!	95th percentile:	28

Do not qualify for equivalent to secondary

Temperature		
wet	15.91	15.91
summer	21.7	21.7
annual	18.805	
	7.7	7.7
	23.2	23.2
	15.45	15.45

ATTACHMENT 8

SPECIAL CONDITIONS RATIONALE

**VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE**

B. ADDITIONAL TOTAL RESIDUAL CHLORINE (TRC) LIMITATIONS AND MONITORING REQUIREMENTS

Rationale: Required by Sewage Collection and Treatment Regulations, 9VAC25-790. Also, 40 CFR 122.41(e) requires the permittee, at all times, to properly operate and maintain all facilities and systems of treatment in order to comply with the permit. This ensures proper operation of chlorination equipment to maintain adequate disinfection.

C. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1. 95% Design Capacity Notification

Rationale: Required by VPDES Permit Regulation, 9VAC25-31-200 B 4 for all POTW and PVOTW permits.

2. Certificate to Construct (CTC) and Certificate to Operate (CTO) Requirements

Rationale: Required by Code of Virginia § 62.1-44.19; Sewage Collection and Treatment Regulations, 9 VAC 25-790.

3. Operations & Maintenance (O&M) Manual Requirements

Rationale: Required by Code of Virginia § 62.1-44.19; Sewage Collection and Treatment Regulations, 9 VAC 25-790; VPDES Permit Regulation, 9VAC25-31-190 E.

4. Permit Reopeners

a. Sludge Reopener

Rationale: Required by VPDES Permit Regulation, 9VAC25-31-220 C for all permits issued to treatment works treating domestic sewage.

b. Total Maximum Daily Load (TMDL) Reopener

Rationale: Section 303(d) of the Clean Water Act requires that total maximum daily loads (TMDLs) be developed for streams listed as impaired in order that they achieve the applicable water quality standards. This condition allows for the permit to be either modified or, alternatively, revoked and reissued to bring it into compliance with any applicable TMDL approved for the receiving stream. The reopener recognizes that, according to section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan or other waste load allocation prepared under section 303 of the Act.

5. Licensed Wastewater Operator Requirement

Rationale: The VPDES Permit Regulation, 9VAC25-31-200 C and the Code of Virginia § 54.1-2300 et seq, Rules and Regulations for Waterworks and Wastewater Works Operators (18VAC160-20-10 et seq.), require licensure of operators.

6. Reliability Class

Rationale: Required by Sewage Collection and Treatment Regulations, 9VAC25-790 for all municipal facilities.

7. Compliance Reporting

Rationale: Authorized by the VPDES Permit Regulation, 9 VAC 25-31-190 J.4. and 220 I. This condition is necessary when pollutants are monitored by the permittee and a maximum level of quantification and/or a specific analytical method is required in order to assess compliance with a permit limit or to compare effluent quality with a numeric criterion. The condition also establishes protocols for calculation of reported values.

8. Ground Water Monitoring Plan

Rationale: The State Water Control Law, Section 62.1-44.21, authorizes the Board to request information needed to determine the discharge's impact on State waters. Ground water monitoring for parameters of concern will indicate whether the system integrity is being maintained and will determine if activities at the site are resulting in violations of the State Water Control Board's Ground Water Standards.

9. Indirect Dischargers

Rationale: Required by VPDES Permit Regulation, 9VAC25-31-200 B 1 and B 2 for POTWs and PVOTWs that receive waste from someone other than the owner of the treatment works.

10. Sludge Use and Disposal

Rationale: VPDES Permit Regulation, 9VAC25-31-100 P; 220 B 2; and 420 through 720, and 40 CFR Part 503 require all treatment works treating domestic sewage to submit information on sludge use and disposal practices and to meet specified standards for sludge use and disposal.

11. Ammonia and Chlorine Limitations

Rationale: The effluent limitations for ammonia-nitrogen and chlorine, which are contained within the permit, have been based on the discharge being intermittent in nature. The chronic criteria are based on a 96-hour exposure (4 days). Therefore, if the facility discharges more than 3 consecutive days, the permit will need to include limits which also consider the chronic water quality criteria for ammonia and chlorine.

12. Closure Plan

Rationale: Required by Code of Virginia § 62.1-44.18:3 and the Board's Financial Assurance Regulation, 9VAC25-650-10 et seq.

13. Permit Application Requirement

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-100 D. and 40 CFR 122.21 (d)(1) require a new application at least 180 days prior to expiration of the existing permit. In addition, the VPDES Permit Regulation, 9 VAC 25-31-100 E.1. and 40 CFR 122.21 (e)(1) note that a permit shall not be issued before receiving a complete application.

Part II CONDITIONS APPLICABLE TO ALL VPDES PERMITS

Rationale: VPDES Permit Regulation, 9VAC25-31-190 requires all VPDES permits to contain or specifically cite the conditions listed.

ATTACHMENT 9

RECEIVING WATERS INFO./PLANNING MEMO

Planning Statement for VPDES Permit Application Processing DEQ-SCRO

VPDES	OwnerName	Facility	County
VA0022691	Halifax County Public Schools	South of Dan Elementary School	Halifax

Outfall #: 001

River Basin: Roanoke

Receiving Stream: Halfway Creek, UT

Subbasin: Lower Dan/Banister

Watershed Code: L74R

River Mile: 0.14

	MGD		MGD
1Q10	0	HF 1Q10	0
7Q10	0	HF7Q10	0
30Q5	0	HF30Q10	0
30Q10	0	HM	0

Modeling Notes

WQMP Name No Plan

Statement

TMDL ID None


Impairment Cause

TMDL Due Date

Completed TMDL Information

None

TMDL Approval Dates



 Amanda B. Gray, Water Planning Engineer or
 Paula Nash, TMDL Coordinator

8/4/18

 Date

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY

South Central Regional Office - Water Planning

7705 Timberlake Road Lynchburg, VA 24502 434/582-5120

SUBJECT: Flow Frequency Determination
South of Dan Elementary School - #VA0022691

TO: Frank Bowman

FROM: Amanda Gray *ag*

DATE: August 4, 2010

COPIES: File

The South of Dan Elementary School discharges to an unnamed tributary of Halfway Creek in Halifax County, Virginia. Flow frequencies are required at this site for use by the permit writer in developing the VPDES permit.

The flow frequencies for the receiving stream were determined by inspection of the USGS Quadrangle topographic map. The map depicts the stream as intermittent. The flow frequencies for intermittent streams are 0.0 cfs for the 1Q10, 7Q10, 30Q5, 30Q10, HF1Q10, HF7Q10, HF30Q10 and harmonic mean.

If you have any questions regarding this analysis please feel free to contact me.

MEMORANDUM
Department of Environmental Quality
Blue Ridge Regional Office-Lynchburg

7705 Timberlake Road

Lynchburg, Virginia 24502

Subject: Planning and TMDL Service Requests for VPDES Permits

To: Amanda Gray, Water Planning Engineer to
Paula Nash, TMDL Coordinator

From: Frank Bowman

Date: August 4, 2010

Copies: Planning File

The request for information is to be made at the following times:

Planning: Upon sending the reissuance reminder letter to the facility or, for an issuance or modification,
at the time of application/modification request receipt.
TMDL: Same as above. For VPDES general permits, at the time of registration statement receipt.

FACILITY NAME: South of Dan Elementary School

VPDES PERMIT NO. VA0022691

EXPIRATION DATE: July 31, 2011

FACILITY PHYSICAL LOCATION: 1011 South of Dan Road, South Boston, VA

INDIVIDUAL PERMIT ACTION: Issuance **Reissuance** Modification

GENERAL PERMIT ACTION: New Coverage Previously Covered

PERMIT TYPE: Major **Minor** General **Municipal** Industrial Storm Water TMP TRE

If a VPDES General Permit, which type: _____

PERMIT WRITERS: ATTACH THE FOLLOWING

- Topo map with facility location and outfall locations clearly marked (include any proposed outfalls)
- Site diagram for facilities with multiple outfalls
- Description or map showing effluent flow path if not apparent on topo map
- The outfall numbers, latitude, longitude, receiving stream and topo name in the table below (use an additional sheet if there are more outfalls)

Outfall No.	Latitude	Longitude	Receiving Stream	Topo Name
001	36° 37' 32"	79° 54' 45"	Halfway Creek, UT	South Boston

DATE INFORMATION NEEDED: February 1, 2011

Wqrm Water Shed Code L74

Station ID 4AHYC002.70

Station Description RT. 58 BRIDGE NEAR ENTRANCE TO KERR LAKE

Collection Date Time	Temp ° C	HARDNESS, TOTAL (MG/L AS CaCO3) Field pH mg/L as CaCO3
07/05/1974	25.6	7.4
08/19/1974	26.1	7.0
09/05/1974	20.6	7.0
09/30/1974	18.3	6.6
11/13/1974	10.0	7.5
12/17/1974	6.7	7.0
01/16/1975	7.2	6.7
02/13/1975	3.3	7.0
03/04/1975	3.3	7.0
04/09/1975	13.3	7.0
05/04/1975	18.3	7.0
06/19/1975	28.9	7.0
06/30/1975	25.6	7.0
08/15/1975	26.7	7.0
09/22/1975	22.2	7.3
10/01/1975	23.3	6.8
11/05/1975	14.4	7.0
12/02/1975	8.9	7.0
03/01/1976	13.9	7.0
05/11/1976	19.4	7.5
06/04/1976	21.1	7.0
07/01/1976	26.1	9.0
10/12/1976	18.9	6.5
12/01/1976	5.6	7.5
02/16/1977	6.0	7.5
05/02/1977	23.0	7.5
07/06/1977	2.1	9.0
08/02/1977	2.8	8.5
10/18/1977	1.5	7.0
11/01/1977	1.6	7.3
11/30/1977	0.7	7.5
03/01/1978	3.0	7.5
05/01/1978	15.0	6.9
07/11/1978	28.0	7.5
08/03/1978	29.0	6.7
10/02/1978	21.0	7.0
12/04/1978	10.0	6.5
04/26/1979	18.5	7.0
06/04/1979	21.0	6.7
08/07/1979	32.0	8.0
09/13/1979	21.0	7.3
10/11/1979	15.0	6.8
11/08/1979	13.0	7.0
12/03/1979	4.0	7.0
01/03/1980	7.0	4.0
02/11/1980	2.5	6.5

03/24/1980	11.5	7.5
04/17/1980	16.0	6.5
05/15/1980	19.5	7.3
06/19/1980	25.0	7.2
07/17/1980	32.5	7.9
11/06/1980	10.0	7.5
12/04/1980	4.0	7.1
02/03/1981	1.5	7.6
03/03/1981	8.5	7.3
04/01/1981	13.0	7.4
05/28/1981	22.0	9.0
06/25/1981	33.0	8.9
07/23/1981	28.0	7.8
08/25/1981	28.0	7.4
09/03/1981	25.0	7.4
10/21/1981	14.0	7.1
12/15/1981	1.0	6.8
02/24/1982	9.0	7.0
03/10/1982	8.0	7.0
04/27/1982	15.5	6.7
05/11/1982	22.5	7.6
06/16/1982	23.0	6.5
07/15/1982	25.0	6.5
08/11/1982	24.0	6.8
09/20/1982	25.0	7.5
10/13/1982	19.0	6.8
11/09/1982	15.0	6.8
12/08/1982	11.0	7.0
01/11/1983	8.0	7.0
02/18/1983	6.0	6.5
03/24/1983	9.5	6.6
04/26/1983	14.0	6.7
05/24/1983	22.0	6.7
06/30/1983	25.0	7.0
07/19/1983	29.5	9.0
08/24/1983	28.5	7.5
11/22/1983	11.0	6.7
12/15/1983	11.0	7.9
01/26/1984	6.0	6.8
02/02/1984	6.0	6.8
03/21/1984	12.0	5.6
04/25/1984	14.5	7.7
05/04/1984	20.0	6.9
06/11/1984	28.0	6.1
07/09/1984	24.0	6.9
08/13/1984	25.0	6.5
09/09/1984	21.0	6.8
10/15/1984	17.0	5.7
12/27/1984	8.0	7.0
01/16/1985	3.2	6.2
02/13/1985	4.5	6.5
03/19/1985	7.0	6.6

04/16/1985	20.0	6.6	
05/21/1985	27.0	7.4	
06/18/1985	24.0	7.5	
07/16/1985	28.5	8.8	
08/13/1985	29.5	8.3	
09/10/1985	27.5	6.9	
11/25/1985	15.0	7.2	
12/18/1985	7.5	7.1	
01/30/1986	1.5	7.0	
02/26/1986	5.9	8.0	
03/20/1986	12.0	6.9	
04/22/1986	16.5	7.5	
05/21/1986	21.5	7.3	
06/16/1986	27.0	8.6	
07/14/1986	31.0	8.0	
08/04/1986	25.5	7.6	
09/02/1986	23.5	9.4	
10/09/1986	21.0	7.3	
11/13/1986	9.0	7.5	
12/03/1986	9.5	7.8	
01/13/1987	6.0	7.5	
02/24/1987	3.7	7.5	
03/30/1987	13.5	7.3	
04/21/1987	16.4	7.2	
	16.4	7.2	
05/28/1987	23.0	7.1	
06/24/1987	26.6	7.3	
06/24/1987	26.6	7.3	
07/21/1987	29.0	8.4	
07/21/1987	29.0	8.4	
08/04/1987	31.9	8.9	
08/04/1987	31.9	8.9	
09/01/1987	26.0	7.3	
10/05/1987	18.1	7.3	
11/30/1987	10.0	7.5	
01/04/1988	6.5	7.9	
02/23/1988	6.5	0.0	
	6.5	0.0	
03/17/1988	7.8	7.6	
04/27/1988	16.2	7.5	
05/24/1988	23.4	0.0	
06/07/1988	24.0	7.8	
07/11/1988	27.6	7.8	
08/11/1988	25.2	7.4	
09/26/1988	21.0	7.2	
10/19/1988	10.9	7.4	
11/02/1988	6.1	7.1	
12/06/1988	1.3	6.7	40
01/19/1989	0.0	0.0	42
03/14/1989	0.0	0.0	36
04/17/1989	14.8	7.2	32
05/11/1989	16.5	7.2	32

06/14/1989	24.3	6.9	
07/11/1989	23.2	7.3	32
07/17/1989	23.2	7.3	
08/09/1989	24.8	7.5	
08/29/1989	0.0	0.0	
09/13/1989	24.3	7.1	40
10/12/1989	16.0	7.6	34
11/14/1989	13.7	7.4	38
12/27/1989	1.2	7.7	30
01/08/1990	5.9	9.3	
01/09/1990	0.0	0.0	28
02/01/1990	7.7	0.0	36
03/05/1990	8.2	7.8	32
04/02/1990	14.8	7.8	34
05/01/1990	18.6	6.8	38
06/05/1990	19.4	8.0	32
07/02/1990	25.9	7.6	36
08/02/1990	25.8	7.0	26
	25.8	7.0	
09/19/1990	21.0	7.0	88
	0.0	0.0	
10/03/1990	17.9	7.2	50
11/01/1990	12.7	7.2	34
12/10/1990	5.2	7.9	52
01/10/1991	0.0	0.0	30
02/04/1991	0.0	0.0	34
03/11/1991	10.0	7.0	30
04/09/1991	19.0	7.1	34
	0.0	0.0	
05/09/1991	20.6	7.1	40
06/10/1991	24.0	7.6	
07/08/1991	27.3	6.4	37
08/19/1991	26.0	7.2	36
09/18/1991	26.0	7.1	50
10/17/1991	14.0	7.2	
11/21/1991	10.4	7.3	
11/21/1991	0.0	0.0	
	0.0	0.0	
12/18/1991	5.5	6.9	36
01/14/1992	8.9	7.2	36
02/20/1992	8.9	6.6	40
03/16/1992	7.9	5.8	32
04/14/1992	17.6	6.2	42
05/18/1992	22.7	6.2	18
06/11/1992	23.1	6.2	42
07/08/1992	25.9	6.1	70
08/19/1992	23.0	6.4	42
09/16/1992	21.8	6.9	50
10/07/1992	15.5	6.6	42
11/09/1992	10.3	6.8	46
12/07/1992	6.3	6.8	38
01/07/1993	9.9	6.7	35

02/03/1993	4.8	6.7	26
03/08/1993	10.9	6.5	28
04/13/1993	15.3	6.5	24
05/13/1993	23.1	6.5	30
06/03/1993	23.1	6.3	40
07/15/1993	31.8	6.7	24
08/12/1993	26.7	7.0	36
09/21/1993	22.7	6.6	54
10/18/1993	16.6	7.1	38
11/09/1993	8.5	7.0	40
12/14/1993	4.3	6.7	48
01/25/1994	4.2	6.5	32
02/24/1994	7.3	6.4	22
03/29/1994	12.9	6.2	21
04/25/1994	17.0	6.6	30
05/16/1994	21.2	6.8	34
06/21/1994	28.7	6.9	28
07/25/1994	28.3	7.6	44
08/25/1994	24.2	6.9	31
09/22/1994	20.0	6.8	37
10/26/1994	14.0	6.7	35
11/14/1994	8.8	7.0	36
12/15/1994	5.6	7.2	36
01/17/1995	10.0	6.7	29
02/09/1995	2.2	7.0	34
03/13/1995	10.7	6.6	28
04/12/1995	16.3	6.9	40
05/11/1995	18.4	6.8	40
06/19/1995	22.3	7.0	32
07/19/1995	25.8	6.1	26
08/16/1995	28.3	7.1	42
09/14/1995	23.0	6.9	41
10/16/1995	17.2	6.9	41
11/16/1995	10.3	6.6	28
12/13/1995	3.6	6.8	32
01/25/1996	6.8	6.4	28
02/12/1996	6.6	6.7	28
03/05/1996	8.5	7.2	30
04/01/1996	11.4	6.6	30
05/08/1996	19.9	6.8	33
06/06/1996	22.1	6.9	36
07/02/1996	27.8	8.4	40
08/07/1996	23.0	6.1	30
09/04/1996	22.7	6.8	41
10/03/1996	19.6	6.4	34
11/12/1996	7.9	6.7	34
12/09/1996	7.0	6.4	26
01/13/1997	3.3	6.6	30
02/05/1997	7.3	7.0	32.6
03/05/1997	12.2	6.9	32.4
04/02/1997	13.4	6.9	28.1
05/01/1997	16.9	6.6	30.7

06/19/1997 '	24.8	6.8	33.7
07/17/1997 '	0.0	0.0	36.2
08/14/1997 '	26.4	7.1	35.3
09/02/1997 '	24.3	7.1	39.1
10/06/1997 '	19.9	7.1	37.2
11/03/1997 '	11.7	7.1	34.6
12/01/1997 '	8.0	6.9	46.9
12/04/1997 '	0.0	0.0	
01/05/1998 (	3.0	6.9	38.4
02/02/1998 '	8.7	6.8	33
03/02/1998 (	10.3	6.6	26.6
04/01/1998 '	17.4	6.6	22.4
05/04/1998 '	17.9	6.6	17.3
06/01/1998 '	24.8	6.6	27.3
07/01/1998 (	27.3	6.8	32.4
08/03/1998 (	25.3	7.0	30.9
09/01/1998 (	26.1	7.2	38.4
10/01/1998 (	23.2	7.3	33.4
11/05/1998 (	10.6	6.4	42
12/10/1998 (	10.8	6.9	35
01/14/1999 '	3.5	6.5	56
02/10/1999 (	8.9	6.7	40
03/10/1999 '	6.0	6.7	50
04/14/1999 '	16.7	6.9	38
05/17/1999 '	18.7	6.7	32
06/14/1999 '	28.0	7.5	36
07/26/1999 '	28.4	7.8	39.7
08/19/1999 '	28.0	6.9	45.1
10/06/1999 '	20.4	6.7	14.2
11/08/1999 '	11.2	6.6	33.8
12/06/1999 '	8.2	6.7	41.3
02/02/2000 '	3.0	6.7	31.3
03/02/2000 '	10.7	7.1	28
04/05/2000 '	14.9	6.9	26
05/03/2000 '	19.0	6.9	28
06/29/2000 '	23.5	6.4	24
07/17/2000 '	25.6	6.7	30
08/14/2000 '	26.2	6.7	31.1
09/12/2000 '	22.4	6.5	34.1
10/19/2000 '	14.4	7.1	
11/06/2000 '	10.6	7.1	33.4
12/19/2000 '	5.8	6.9	38.4
01/31/2001 '	4.6	7.0	40.3
02/27/2001 '	11.8	7.0	33.1
03/22/2001 '	9.2	6.3	7.9
04/19/2001 '	14.8	6.9	5.6
08/06/2001 '	25.6	6.7	32.6
10/15/2001 '	15.1	7.1	13.2
12/05/2001 (	9.8	6.9	30
02/12/2002 '	6.2	6.7	17.5
04/24/2002 '	20.6	7.4	46.5
06/11/2002 '	25.8	7.4	45.5

08/27/2002 '	26.4	7.0	39.9
10/16/2002 '	15.9	6.7	28.2
12/19/2002 '	7.1	6.5	29.6
02/25/2003 '	8.1	6.5	34.3
05/29/2003 '	19.1	6.5	27.4
06/19/2003 '	24.2	6.6	22.7
01/29/2007 '	6.0	6.9	
03/05/2007 '	9.3	7.0	
05/08/2007 '	17.8	7.1	
07/16/2007 '	27.1	7.2	
09/25/2007 '	22.9	7.4	
11/26/2007 '	8.9	7.1	
01/29/2008 '	3.2	7.1	
03/27/2008 '	13.0	7.1	
05/29/2008 '	23.5	6.9	
07/09/2008 '	26.6	7.2	
09/22/2008 '	21.6	7.1	
11/17/2008 '	10.7	7.5	
01/19/2011 '	3.3	6.9	

90th:	26.888	7.676	34.58947 avg
10th:		6.38	

ATTACHMENT 10

TABLE A AND TABLE B - CHANGE SHEETS

TABLE A

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes FROM PREVIOUS PERMIT and give a brief rationale for the changes).

OUTFALL NUMBER	PARAMETER	MONITORING CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL
	Added Total Maximum Daily Load (TMDL) Reopener	3/9/11, GFB

TABLE B

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes MADE DURING PERMIT PROCESS and give a brief rationale for the changes).

NOTE: INCLUDE ONLY CHANGES MADE DUE TO OUTSIDE COMMENTS (OWNER, EPA, PUBLIC, ETC.). LEAVE THIS TABLE OUT IF THERE ARE NO SUCH CHANGES.

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
001					

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

ATTACHMENT 11

EPA/VIRGINIA DRAFT PERMIT SUBMISSION CHECKLIST

Part I. Virginia Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name:	South of Dan Elementary School
NPDES Permit Number:	VA0022691
Permit Writer Name:	Frank Bowman
Date:	3/9/11

Major ☐ Minor ☒ Industrial ☐ Municipal ☒

I.A. Draft Permit Package Submittal Includes:	Yes	No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?	X		
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?			X
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?		X	
8. Whole Effluent Toxicity Test summary and analysis?			X
9. Permit Rating Sheet for new or modified industrial facilities?			X

I.B. Permit/Facility Characteristics	Yes	No	N/A
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet or permit contain a description of the wastewater treatment process?	X		
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	

I.B. Permit/Facility Characteristics – cont.	Yes	No	N/A
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X	
7. Does the fact sheet or permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water?		X	
8.a. Has a TMDL been developed and approved by EPA for the impaired water?			X
8.b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?			X
8.c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?			X
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X	
10. Does the permit authorize discharges of storm water?		X	
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit?		X	
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria?		X	
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?		X	
17. Does the permit include appropriate Pretreatment Program requirements?			X
18. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
19. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?	X		
20. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
21. Has previous permit, application, and fact sheet been examined?	X		

Part II NPDES Draft Permit Checklist
Region III NPDES Permit Quality Checklist – for POTWs
 (To be completed and included in the record only for POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a Comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the record discuss whether “antibacksliding” provisions were met for any limits that are less stringent than those in the previous NPDES permit?			X

II.C. Technology-Based Effluent Limits (POTWs)	Yes	No	N/A
1. Does the permit contain numeric limits for <u>ALL</u> of the following: BOD (or alternative, e.g., CBOD, COD, TOC), TSS and pH?	X		
2. Does the permit require at least 85% removal for BOD (or BOD alternative) and TSS (or 65% for equivalent to secondary) consistent with 40 CFR Part 133?	X		
2.a. If no, does the record indicate that application of WQBELs, or some other means, results in more stringent requirements than 85% removal or that an exception consistent with 40 CFR 133.103 has been approved?			X
3. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?	X		
4. Are permit limits for BOD and TSS expressed in terms of both long-term (e.g., average monthly) and short term (e.g., average weekly) limits?	X		
5. Are any concentration limitations in the permit less stringent than the Secondary treatment requirements (30 mg/l BOD5 and TSS for a 30-day average and 45 mg/l BOD5 and TSS for a 7-day average)?	X		
5.a. If yes, does the record provide a justification (e.g., waste stabilization pond, trickling filter, etc.) for the alternate limitations?	X		

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering state narrative and numeric criteria for water quality?	X		
2. Does the fact sheet indicate that any WQBELs were derived from a completed and EPA approved TMDL?			X

II.D. Water Quality-Based Effluent Limits – cont.	Yes	No	N/A
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a “reasonable potential” evaluation was performed?	X		
4.a. If yes, does the fact sheet indicate that the “reasonable potential” evaluation was performed in accordance with the State’s approved procedures?	X		
4.b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?		X	
4.c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have “reasonable potential”?	X		
4.d. Does the fact sheet indicate that the “reasonable potential” and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations)?			X
4.e. Does the permit contain numeric effluent limits for all pollutants for which “reasonable potential” was determined?	X		
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term AND short-term effluent limits established?	X		
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?	X		
8. Does the record indicate that an “antidegradation” review was performed in accordance with the State’s approved antidegradation policy?	X		

II.E. Monitoring and Reporting Requirements	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters and other monitoring as required by State and Federal regulations?	X		
1.a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate his waiver?			X
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require at least annual influent monitoring for BOD (or BOD alternative) and TSS to assess compliance with applicable percent removal requirements?		X	
4. Does the permit require testing for Whole Effluent Toxicity?		X	


II.F. Special Conditions	Yes	No	N/A
1. Does the permit include appropriate biosolids use/disposal requirements?	X		

II.F. Special Conditions – cont.	Yes	No	N/A
2. Does the permit include appropriate storm water program requirements?			X
3. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			X
4. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?		X	
5. Does the permit authorize discharge of sanitary sewage from points other than the POTW outfall(s) or CSO outfalls [i.e., Sanitary Sewer Overflows (SSOs) or treatment plant bypasses]?		X	
5.a. Does the permit require implementation of the "Nine Minimum Controls"?			X
5.b. Does the permit require development and implementation of a "Long Term Control Plan"?			X
5.c. Does the permit require monitoring and reporting for CSO events?			X
6. Does the permit include appropriate Pretreatment Program requirements?			X

II.G. Standard Conditions	Yes	No	N/A
1. Does the permit contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X		
List of Standard Conditions – 40 CFR 122.41 <ul style="list-style-type: none"> Duty to comply Duty to reapply Need to halt or reduce activity not a defense Duty to mitigate Proper O & M Permit Actions Property rights Duty to provide information Inspections and entry Monitoring and reporting Signatory requirement Reporting requirements <ul style="list-style-type: none"> Planned change Anticipated non-compliance Transfers Monitoring Reports Compliance schedules 24-hour reporting Other non-compliance Bypass Upset 			
2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for POTWs regarding notification of new introduction of pollutants and new industrial users [40 CFR 122.42(b)]?	X		

Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	Frank Bowman
Title	Environmental Engineer
Signature	
Date	3/10/11

ATTACHMENT 12

CHRONOLOGY SHEET

CHRONOLOGY OF EVENTS

APPLICATION RECEIVED	APPLICATION RETURNED	ADDITIONAL INFO REQUESTED	APPLICATION/ADD INFO DUE BACK IN RO	APPLICATION/ADD. INFO RECEIVED
2/1/11				
APPLICATION TO VDH: 2/2/11		VDH COMMENTS RECEIVED: 2/4/11		
APPLICATION ADMIN. COMPLETE: 2/1/11		APPLICATION TECH. COMPLETE: 3/1/11		

Date DESCRIPTIVE STATEMENT [CHRONOLOGY OF EVENTS] (Meetings, telephone calls, letters, memos, hearings, etc. affecting permit from application to issuance)

8/2/10	Reissuance letter sent to owner
2/1/11	One copy of permit application received
2/9/11	Application administratively complete letter sent
3/10/11	Draft permit/FS sent for review
3/25/11	Review comments received
4/20/11	Draft permit/FS sent for 2 nd review
5/19/11	Draft permit/FS sent to owner for review
5/31/11	Change of Ownership Form from Halifax County to South Boston Foursquare Church received